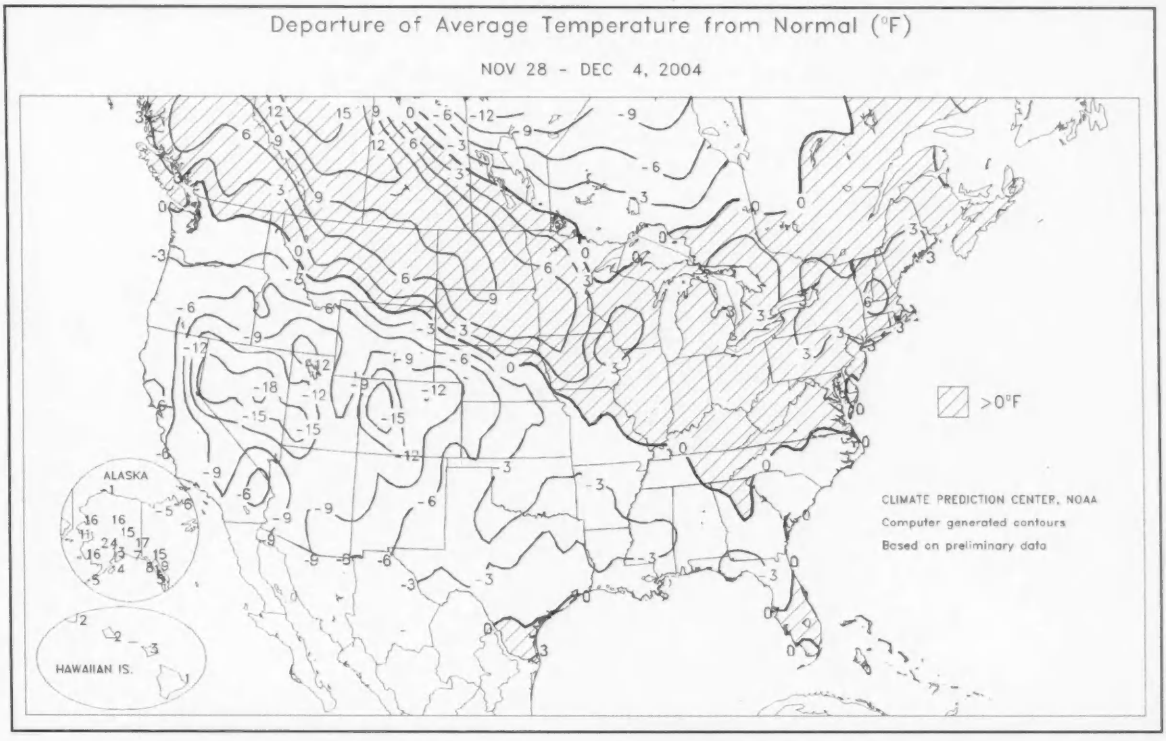
Volume 91, No. 49 http://www.usda.gov/oce/waob/jawf/wwcb.html December 7, 2004

WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service
and World Agricultural Outlook Board



HIGHLIGHTS

November 28 - December 4, 2004

Highlights provided by USDA/WAOB

Cold weather gripped areas from the **Pacific Coast eastward to the central and southern High Plains**. In **southern California's winter agricultural regions**, including the **San Joaquin and Imperial Valleys**, cold weather helped to acclimate citrus trees to wintry conditions but necessitated protective measures, including the activation of sprinkler systems, to protect some winter crops from freeze damage. Farther east, weekly temperatures generally ranged from 10 to 20°F below normal from the **Great Basin to the central Rockies**. Meanwhile, favorably dry weather prevailed on the **southern Plains**, although low temperatures slowed

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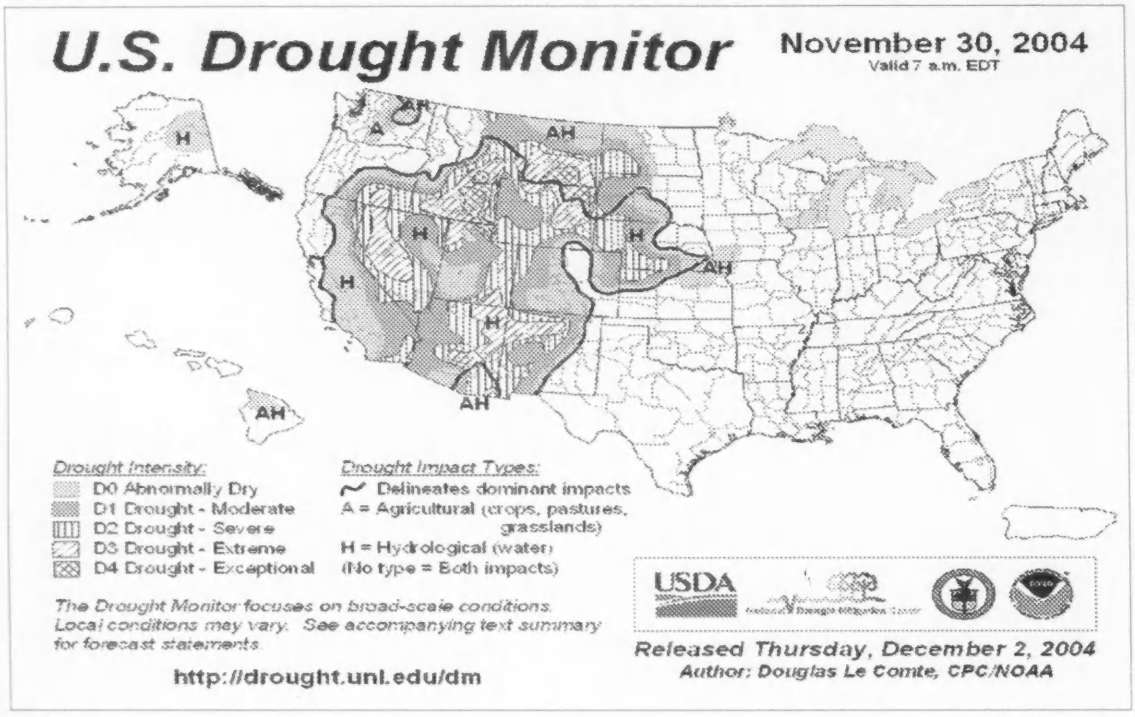
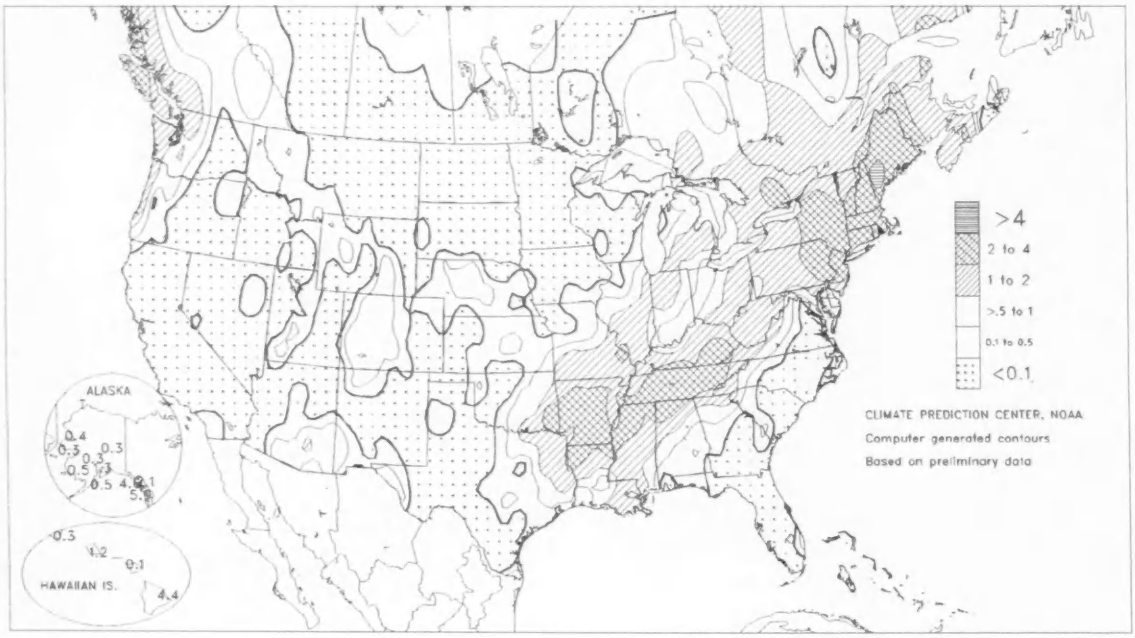
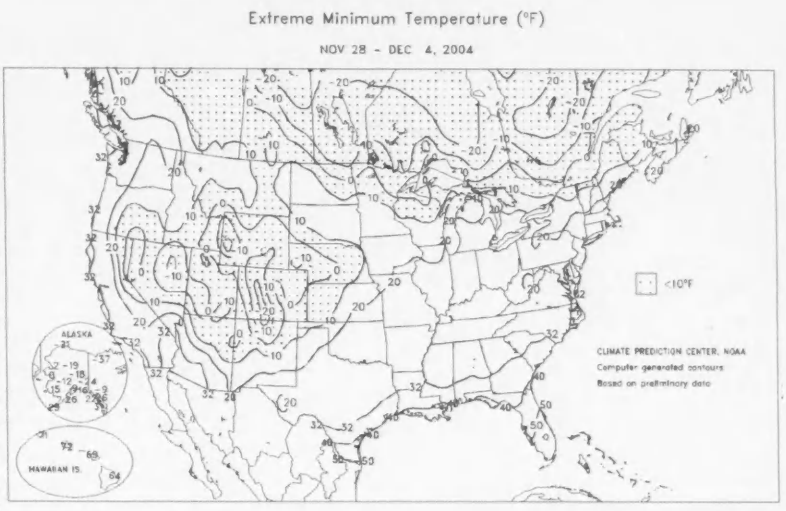

U.S. Drought Monitor
November 30, 2004
Valid 7 a.m. EDT
Drought Intensity:
D0 Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Drought Impact Types:
Delineates dominant impacts
A = Agricultural (crops, pastures, grasslands)
H = Hydrological (water)
(No type = Both impacts)
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
http://drought.unl.edu/dm
USDA
Released Thursday, December 2, 2004
Author: Douglas Le Comte, CPC/NOAA

Total Precipitation (Inches)

NOV 28 - DEC 4, 2004



(Continued from front cover)
evaporation rates and helped to maintain wet field conditions. Adverse effects from the **southern High Plains'** wetness included stress on livestock and additional delays in cotton, sorghum, and peanut harvesting. Farther north, early-week snow blanketed the **central Plains**. In contrast, mild, dry weather continued to reduce soil moisture reserves on the **northern Plains**, where weekly temperatures averaged as much as 10°F above normal. Mild, dry weather also prevailed in the **upper Midwest**, promoting late-season corn harvesting. Elsewhere in the **Midwest**, light rain and snow showers across the **southern and eastern Corn Belt** slowed final summer crop harvesting and other fieldwork. Farther south, another wet week maintained soggy conditions and hampered late-autumn fieldwork from the **southeastern Plains to the Tennessee Valley**, including the **Delta**. Elsewhere, cool, dry weather in the **southern Atlantic States** contrasted with mild, wet conditions in the **Northeast**.



Early in the week, heavy snow fell across the **central Plains** and parts of the **Intermountain West**. On November 28, daily-record totals in **Utah** included 25.0 inches at **Brian Head**, 12.0 inches in **Nephi**, and 11.0 inches in **Fillmore**. Farther east, daily totals reached 13.0 inches in **Lander, WY**; 9.9 inches in **North Platte, NE**; and 9.7 inches in **Cheyenne, WY. North Platte's** total represented its snowiest day since March 28, 1980, when 11.6 inches fell. On the **central High Plains**, snow lingered into November 29, when **Dodge City, KS** (5.5 inches), received a daily-record total.

From the **Plains westward**, very cold air trailed the storminess, resulting in more than 200 daily-record lows. In addition, monthly record lows were set or tied on November 30 in several locations, including **Imperial, CA** (32°F, equaling the record set on November 17, 1958); **Santa Barbara, CA** (30°F, equaling the record set on November 19, 2000, and on several earlier dates); and **Grand Junction, CO** (-4°F, breaking the record of -2°F established on November 28, 1976). **Grand Junction** also achieved daily-record lows (2, -4, -2, 0, 0, and 2°F) on 6 consecutive days from November 29 - December 4, its second-longest such streak behind a 10-day cold snap in February 1903. The last day of November featured the week's coldest weather in locations such as **Alamosa, CO** (-20°F), and **Alliance, NE** (-18°F). Farther west, **Bakersfield, CA**, reported freezes (30, 29, 27, 28, 28, and 28°F) on 6 consecutive mornings from November 29 - December 4, setting or tying records each day. Another **California** location noting six consecutive freezes and daily-record lows was **Salinas** (27, 30, 30, 30, 31, and 29°F). In addition to the spate of record lows, **Cedar City, UT** (22°F on November 29), was among the locations noting its lowest maximum temperature on record for November (previously, 23°F on November 14, 1964, and November 19, 1956).

In contrast, record warmth was confined to the **western Gulf Coast region**, where **McAllen, TX**, notched a daily-record high of 92°F on November 29. Meanwhile, heavy rain fell sporadically across the **South** and **East** during the first half of the week. Daily-record totals for November 28 included 3.74 inches in **Mt. Pocono, PA**, and 2.01 inches in **Cape Hatteras, NC.** Two days later, **London, KY** (2.08 inches), collected a daily-record total for November 30. The first day of December featured additional daily rainfall records in the **Northeast**, including 1.37 inches in **Providence, RI**, and 1.15 inches in **Bangor, ME.** Significant snow was confined to **northern New England**, where **Caribou, ME**, measured 6.0 inches on December 1. High winds also swept across the **Northeast** on December 1, gusting to 68 m.p.h. in **Nantucket, MA**, and 61 m.p.h. in **Dubois, PA.** Elsewhere in the **East**, year-to-date precipitation through December 5 reached 51.48 inches (138 percent of normal) in **Bluefield, WV**, eclipsing its 1972 annual record of 51.29 inches. In **western Pennsylvania**, **Pittsburgh's** year-to-date total climbed to 55.31 inches (156 percent of normal), further exceeding its former 1990 standard of 52.24 inches.

For the third consecutive week, unusually mild weather prevailed across much of **Alaska**, where weekly temperatures averaged as much as 24°F above normal. **Cold Bay** (50°F on November 28) was among the **Alaskan** locations to establish a daily-record high. Stormy weather affected much of **southern Alaska**, boosting December 1-5 precipitation to 2.10 inches (269 percent of normal) in **Cold Bay** and 0.72 inch (480 percent) in **Anchorage**, including 9.0 inches of snow. **Pelican**, in **southeastern Alaska**, netted weekly rainfall totaling 10.90 inches, more than half (5.79 inches) of which fell on December 3. Farther south, widespread, generally light showers accompanied warm weather (as much as 3°F above normal) in **Hawaii**. Weekly rainfall reached 3.95 inches in **Hilo**, on the **Big Island**. However, showers continued to bypass some areas, including **Kahului, Maui**. **Kahului** completed its third consecutive month with record-low rainfall, measuring just a trace (2.17 inches below normal) during November.

National Weather Data for Selected Cities

Weather Data for the Week Ending December 4, 2004

Data Provided by Climate Prediction Center (301-763-8000, Ext. 7503)

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	59	38	69	31	48	-1	0.69	-0.35	0.66	0.02	3	58.19	116	92	47	0	2	4	1
	HUNTSVILLE	56	35	64	28	46	-1	1.36	0.05	1.31	0.00	0	52.08	99	90	57	0	4	2	1
	MOBILE	63	44	77	37	54	-1	0.23	-0.97	0.21	0.02	3	73.16	117	84	53	0	0	2	0
	MONTGOMERY	66	40	78	32	53	1	0.29	-0.94	0.29	0.00	0	50.11	99	84	40	0	1	1	0
AK	ANCHORAGE	37	27	45	9	32	13	1.26	1.04	0.66	0.52	400	18.90	125	89	70	0	5	5	1
	BARROW	-5	-11	0	-21	-8	-1	0.04	0.04	0.03	0.00	0	6.04	150	81	76	0	7	2	0
	FAIRBANKS	20	3	33	-18	12	16	0.30	0.16	0.16	0.27	338	8.06	83	90	87	0	7	6	0
	JUNEAU	43	37	48	26	40	9	2.08	0.91	0.96	1.74	260	56.39	105	96	88	0	1	6	2
	KODIAK	40	31	47	26	36	4	0.51	-1.05	0.40	0.51	57	75.29	110	84	63	0	5	2	0
	NOME	28	18	33	0	23	11	0.31	0.06	0.10	0.05	36	16.38	104	94	88	0	7	4	0
AZ	FLAGSTAFF	36	7	41	0	22	-10	0.56	0.15	0.43	0.43	187	19.66	92	86	31	0	7	2	0
	PHOENIX	61	40	70	36	51	-5	0.28	0.11	0.28	0.28	311	6.75	90	54	31	0	0	1	0
	TUCSON	59	34	68	27	47	-7	0.53	0.36	0.53	0.53	530	7.64	68	46	26	0	3	1	1
	YUMA	62	44	65	38	53	-6	0.00	-0.04	0.00	0.00	0	2.89	110	43	26	0	0	0	0
AR	FORT SMITH	53	30	57	26	42	-3	1.52	0.53	1.09	0.00	0	48.71	119	94	54	0	6	3	1
	LITTLE ROCK	55	33	62	28	44	-2	1.64	0.36	1.28	0.01	1	54.35	116	96	49	0	4	3	1
CA	BAKERSFIELD	54	29	59	27	42	-7	0.00	-0.14	0.00	0.00	0	4.58	79	76	52	0	6	0	0
	FRESNO	53	31	55	29	42	-5	0.00	-0.25	0.00	0.00	0	7.65	76	88	69	0	6	0	0
	LOS ANGELES	63	44	67	41	53	-6	0.00	-0.32	0.00	0.00	0	9.89	86	82	30	0	0	0	0
	REDDING	56	36	64	29	46	-1	0.00	-0.94	0.00	0.00	0	25.21	86	58	41	0	2	0	0
	SACRAMENTO	54	30	59	27	42	-6	0.00	-0.51	0.00	0.00	0	13.81	88	92	43	0	6	0	0
	SAN DIEGO	62	45	65	41	53	-6	0.36	0.14	0.36	0.36	277	9.64	101	64	36	0	0	1	0
	SAN FRANCISCO	56	41	58	36	48	-3	0.00	-0.58	0.00	0.00	0	13.24	75	77	58	0	0	0	0
	STOCKTON	56	29	57	26	43	-5	0.00	-0.39	0.00	0.00	0	11.15	91	82	67	0	6	0	0
CO	ALAMOSA	28	-9	42	-20	10	-11	0.04	-0.04	0.03	0.01	25	5.75	83	80	55	0	7	2	0
	CO SPRINGS	37	11	53	3	24	-7	0.00	-0.06	0.00	0.00	0	21.00	124	80	33	0	7	0	0
	DENVER INTL	36	9	50	-1	23	-8	0.09	0.02	0.08	0.00	0	14.72	110	85	48	0	7	2	0
	GRAND JUNCTION	25	2	33	-4	14	-18	0.48	0.37	0.48	0.00	0	9.85	116	84	73	0	7	1	0
	PUEBLO	43	9	57	2	26	-7	0.02	-0.06	0.02	0.00	0	13.28	110	78	41	0	7	1	0
CT	BRIDGEPORT	52	35	58	25	44	5	1.46	0.68	0.74	0.72	164	41.91	102	77	47	0	3	2	2
	HARTFORD	49	31	57	23	40	5	2.06	1.22	1.08	1.08	230	39.14	91	88	49	0	5	2	2
DC	WASHINGTON	54	38	60	30	46	2	0.55	-0.12	0.33	0.33	87	39.86	109	79	40	0	1	3	0
DE	WILMINGTON	51	33	59	23	42	2	1.22	0.45	0.84	0.93	211	53.95	135	84	45	0	3	7	1
FL	DAYTONA BEACH	72	54	80	49	63	0	0.00	-0.59	0.00	0.00	0	61.00	130	91	52	0	0	0	0
	JACKSONVILLE	68	44	80	40	56	-2	0.03	-0.52	0.01	0.01	3	66.73	133	96	56	0	0	3	0
	KEY WEST	80	69	82	66	75	1	1.34	0.89	1.34	0.00	0	29.40	79	82	59	0	0	1	1
	MIAMI	80	66	81	62	73	1	0.00	-0.56	0.00	0.00	0	54.04	95	89	54	0	0	0	0
	ORLANDO	75	56	81	51	65	0	0.00	-0.55	0.00	0.00	0	57.49	124	86	52	0	0	0	0
	PENSACOLA	64	46	76	40	55	-2	0.18	-0.72	0.13	0.05	10	61.73	102	83	53	0	0	2	0
	TALLAHASSEE	66	39	75	34	52	-4	0.00	-0.85	0.00	0.00	0	54.14	91	87	52	0	0	0	0
	TAMPA	75	56	81	51	65	-1	0.04	-0.47	0.04	0.00	0	83.56	149	90	49	0	0	1	0
	WEST PALM	79	63	81	56	71	1	0.97	0.00	0.97	0.97	183	64.30	109	81	53	0	0	1	1
GA	ATHENS	60	36	65	29	48	0	0.71	-0.09	0.36	0.35	76	40.97	92	85	47	0	1	2	0
	ATLANTA	60	38	63	33	49	0	0.82	-0.09	0.46	0.36	71	49.56	106	82	53	0	0	2	0
	AUGUSTA	64	33	69	29	49	-1	0.05	-0.52	0.05	0.05	15	39.45	94	95	44	0	2	1	0
	COLUMBUS	63	39	68	34	51	-1	0.27	-0.74	0.15	0.12	21	46.68	104	92	41	0	0	2	0
	MACON	65	37	66	32	51	0	0.24	-0.59	0.12	0.12	26	46.66	112	89	41	0	1	2	0
	SAVANNAH	65	41	73	36	53	-1	0.01	-0.49	0.01	0.01	3	35.51	75	93	52	0	0	1	0
HI	HILO	82	67	84	64	74	1	4.45	1.31	1.82	2.59	150	126.1	107	87	78	0	0	7	3
	HONOLULU	83	74	84	72	78	2	1.17	0.60	1.10	0.02	6	33.28	211	75	64	0	0	4	1
	KAHULUI	83	71	85	69	77	3	0.06	-0.52	0.00	0.06	18	24.77	154	84	76	0	0	1	0
	LIHUE	80	73	81	71	77	3	0.29	-0.77	0.16	0.08	13	39.21	111	81	77	0	0	6	0
ID	BOISE	34	23	43	18	29	-4	0.01	-0.32	0.01	0.00	0	10.27	93	87	71	0	7	1	0
	LEWISTON	38	29	43	25	33	-3	0.13	-0.12	0.12	0.12	86	14.26	121	82	64	0	6	2	0
	POCATELLO	27	9	32	0	18	-10	0.15	-0.10	0.05	0.05	36	11.34	98	86	71	0	7	3	0
IL	CHICAGO/O'HARE	39	28	44	23	34	2	0.80	0.16	0.71	0.02	6	31.17	91	86	68	0	6	3	1
	MOLINE	41	27	51	22	34	2	0.27	-0.29	0.13	0.00	0	35.71	99	91	71	0	7	3	0
	PEORIA	42	29	52	24	35	2	0.53	-0.14	0.35	0.00	0	33.43	98	96	72	0	6	2	0
	ROCKFORD	36	23	41	14	30	0	0.47	-0.09	0.42	0.00	0	36.41	104	95	75	0	7	3	0
	SPRINGFIELD	44	31	54	27	38	3	0.81	0.16	0.43	0.00	0	34.01	102	88	73	0	4	3	0
IN	EVANSVILLE	49	33	54	28	41	1	0.89	-0.27	0.44	0.00	0	41.48	101	92	64	0	4	2	0
	FORT WAYNE	42	29	48	27	35	1	0.82	-0.07	0.31	0.11	28	36.65	107	95	73	0	6	4	0
	INDIANAPOLIS	44	32	51	27	38	2	0.73	-0.06	0.55	0.12	27	47.16	123	90	65	0	4	3	1
	SOUTH BEND	40	29	46	26	34	1	0.75	-0.03	0.58	0.08	18	34.58	93	93	74	0	7	4	1
IA	BURLINGTON	41	28	54	24	35	2	0.42	-0.15	0.30	0.03	9	33.83	94	96	67	0	6	4	0
	CEDAR RAPIDS	41	23	50	17	32	3	0.11	-0.32	0.08	0.00	0	33.07	103	97	64	0	7	2	0
	DES MOINES	42	24	52	19	33	3	0.01	-0.35	0.01	0.00	0	37.07	110	92	65	0	7	1	0
	DUBUQUE	39	23	45	17	31	3	0.00	-0.48	0.00	0.00	0	30.14	88	89	71	0	7	0	0
	SIOUX CITY	42	17	51	7	30	3	0.12	-0.07	0.06	0.01	10	25.59	101	85	66	0	7	3	0
	WATERLOO	***	***	***	***	***	***	***	***	***	***	***	33.48	104	***	***	***	***	***	***
KS	CONCORDIA	41	23	55	15	32	-2	0.09	-0.14	0.06	0.00	0	24.53	89	87	64	0	7	2	0
	DODGE CITY	41	20	52	7	31	-5	0.11	-0.06	0.09	0.00	0	24.44	113	82	54	0	7	3	0
	GOODLAND	36	14	50	6	25	-7	0.09	0.00	0.05	0.00	0	20.66	106	79	57	0	7	2	0
	TOPEKA	44	24	61	20	34	-2	0.17	-0.24	0.09	0.00	0	39.15	114	88	69	0	7	3	0

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending December 4, 2004

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN.; SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN.; SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	48	25	57	20	37	0	0.05	-0.28	0.03	0.00	0	37.07	127	94	63	0	6	2	0
KY	JACKSON	51	35	57	30	43	1	1.98	0.93	1.74	0.21	35	59.60	130	83	50	0	2	4	1
	LEXINGTON	49	33	56	28	41	1	1.52	0.61	1.52	0.00	0	59.24	140	89	67	0	4	1	1
	LOUISVILLE	50	35	55	28	43	1	0.53	-0.37	0.51	0.01	2	50.64	122	85	54	0	3	3	1
	PADUCAH	49	32	55	26	41	0	1.14	-0.01	0.65	0.00	0	38.15	84	93	55	0	5	2	1
LA	BATON ROUGE	65	41	77	36	53	-2	0.66	-0.50	0.61	0.05	8	67.68	116	95	52	0	0	2	1
	LAKE CHARLES	66	44	76	38	55	-1	0.19	-0.86	0.13	0.13	22	66.10	124	89	50	0	0	3	0
	NEW ORLEANS	65	48	77	43	56	-1	1.13	-0.14	0.80	0.33	46	76.22	127	85	66	0	0	3	1
	SHREVEPORT	61	36	70	29	49	-2	1.37	0.32	1.05	0.00	0	60.49	128	92	53	0	2	2	1
ME	CARIBOU	32	16	43	2	24	2	1.75	1.04	0.85	0.85	207	30.74	89	91	70	0	7	3	2
	PORTLAND	44	31	52	22	38	6	2.45	1.45	1.16	1.29	226	37.95	90	93	58	0	4	3	2
MD	BALTIMORE	52	31	59	23	42	2	1.08	0.34	0.54	0.49	117	43.42	111	85	45	0	4	3	1
MA	BOSTON	49	37	58	31	43	4	1.31	0.45	0.80	0.51	104	41.56	106	76	51	0	1	2	2
	WORCESTER	46	32	54	23	39	6	2.70	1.83	1.59	1.11	227	42.24	92	84	50	0	4	2	2
MI	ALPENA	39	25	44	16	32	3	0.16	-0.25	0.09	0.13	54	22.31	83	91	58	0	7	5	0
	GRAND RAPIDS	39	29	45	26	34	2	0.98	0.23	0.67	0.26	62	37.21	107	94	74	0	7	4	1
	HOUGHTON LAKE	36	25	39	17	31	2	0.39	-0.04	0.20	0.15	63	26.78	99	90	71	0	7	4	0
	LANSING	39	29	45	22	34	2	1.12	0.53	0.74	0.34	103	34.65	117	89	72	0	6	5	1
	MUSKEGON	41	31	45	28	36	3	0.69	0.01	0.47	0.16	42	34.47	113	87	71	0	6	5	0
	TRAVERSE CITY	39	27	45	24	33	2	0.50	-0.08	0.20	0.37	112	28.04	90	93	62	0	7	3	0
MN	DULUTH	30	8	38	-5	19	-1	0.65	0.33	0.36	0.64	376	28.46	94	87	73	0	7	5	0
	INT'L FALLS	30	4	40	-5	17	2	0.09	-0.11	0.04	0.09	82	25.34	109	89	80	0	7	3	0
	MINNEAPOLIS	36	22	45	19	29	5	0.04	-0.24	0.04	0.04	27	26.98	94	83	64	0	7	1	0
	ROCHESTER	32	15	41	9	23	0	0.00	-0.32	0.00	0.00	0	39.20	128	91	81	0	7	0	0
	ST. CLOUD	37	17	43	11	27	7	0.00	-0.19	0.00	0.00	0	28.64	108	88	60	0	7	0	0
MS	JACKSON	62	35	73	32	49	-2	1.00	-0.22	0.76	0.00	0	60.01	117	93	52	0	1	2	1
	MERIDIAN	62	35	72	30	48	-4	0.67	-0.56	0.62	0.00	0	61.38	114	94	55	0	3	2	1
	TUPELO	58	36	64	28	47	0	0.00	-1.37	0.00	0.00	0	55.45	110	87	70	0	4	0	0
MO	COLUMBIA	45	28	58	23	36	0	0.19	-0.53	0.12	0.00	0	45.13	118	90	63	0	6	2	0
	KANSAS CITY	44	26	62	18	35	0	0.14	-0.32	0.09	0.00	0	36.61	100	94	65	0	7	2	0
	SAINT LOUIS	48	33	59	29	40	2	0.86	0.05	0.46	0.00	0	41.63	115	88	65	0	4	3	0
	SPRINGFIELD	48	28	57	22	38	-2	1.50	0.52	1.00	0.00	0	42.85	101	89	63	0	6	3	1
MT	BILLINGS	39	24	51	16	32	3	0.00	-0.13	0.00	0.00	0	10.74	76	59	33	0	6	0	0
	BUTTE	32	11	40	1	21	1	0.00	-0.11	0.00	0.00	0	10.58	86	92	48	0	7	0	0
	GLASGOW	35	19	44	8	27	7	0.02	-0.04	0.02	0.02	67	11.82	109	85	76	0	7	1	0
	GREAT FALLS	40	21	47	13	31	4	0.00	-0.11	0.00	0.00	0	13.56	95	74	37	0	7	0	0
	HAVRE	42	23	50	14	33	10	0.00	-0.08	0.00	0.00	0	11.40	104	74	54	0	6	0	0
	KALISPELL	34	24	40	16	29	3	0.08	-0.30	0.05	0.05	23	15.57	99	90	75	0	7	3	0
	MISSOULA	33	22	41	13	28	2	0.04	-0.20	0.02	0.00	0	14.67	115	84	76	0	7	2	0
NE	GRAND ISLAND	35	17	53	3	26	-3	0.33	0.12	0.33	0.00	0	20.04	79	86	69	0	7	1	0
	LINCOLN	44	21	57	15	33	2	0.13	-0.13	0.12	0.00	0	23.12	84	86	68	0	7	2	0
	NORFOLK	***	***	***	***	***	***	***	***	***	***	***	27.48	106	***	***	***	***	***	***
	NORTH PLATTE	33	6	48	-9	20	-9	0.42	0.33	0.42	0.00	0	19.41	101	91	65	0	7	1	0
	OMAHA	41	21	54	15	31	1	0.09	-0.21	0.09	0.00	0	33.57	114	90	64	0	7	1	0
	SCOTTSBLUFF	33	6	47	-13	19	-9	0.12	-0.02	0.07	0.10	125	11.24	71	82	71	0	7	4	0
	VALENTINE	41	17	55	3	29	2	0.16	0.06	0.11	0.00	0	17.30	90	84	56	0	7	2	0
NV	ELY	28	-1	41	-6	14	-14	0.01	-0.07	0.01	0.00	0	8.56	90	79	65	0	7	1	0
	LAS VEGAS	52	35	56	30	43	-6	0.00	-0.06	0.00	0.00	0	5.65	137	51	28	0	2	0	0
	RENO	30	10	33	4	20	-16	0.00	-0.19	0.00	0.00	0	7.70	115	87	74	0	7	0	0
	WINNEMUCCA	29	11	35	4	20	-12	0.02	-0.15	0.01	0.01	11	6.44	85	87	75	0	7	2	0
NH	CONCORD	46	30	54	25	38	7	2.28	1.56	1.28	1.00	250	37.48	107	92	54	0	6	2	2
NJ	NEWARK	51	36	60	28	43	2	2.50	1.65	1.50	1.00	208	45.90	106	76	47	0	2	2	2
NM	ALBUQUERQUE	41	23	52	16	32	-7	0.04	-0.04	0.03	0.00	0	11.30	125	71	37	0	6	2	0
NY	ALBANY	44	31	52	19	38	5	1.49	0.83	1.00	0.49	132	37.63	105	88	54	0	5	2	1
	BINGHAMTON	41	29	52	19	35	3	2.28	1.51	1.28	0.99	225	40.56	113	85	61	0	5	4	2
	BUFFALO	43	31	50	23	37	3	1.30	0.37	0.63	0.76	146	37.59	101	93	59	0	5	5	1
	ROCHESTER	43	31	50	22	37	3	1.17	0.51	0.60	0.57	150	35.40	112	93	61	0	4	3	1
	SYRACUSE	44	31	52	19	38	5	1.82	0.98	1.04	1.18	251	40.84	109	90	56	0	3	5	2
NC	ASHEVILLE	53	31	56	23	42	0	0.74	-0.06	0.41	0.33	73	49.61	112	86	47	0	3	2	0
	CHARLOTTE	58	33	61	27	45	-3	0.11	-0.57	0.11	0.11	29	41.55	102	87	36	0	3	1	0
	GREENSBORO	57	34	61	27	45	1	0.22	-0.46	0.22	0.22	58	35.41	88	81	37	0	2	1	0
	HATTERAS	60	47	69	39	53	0	2.09	1.15	2.01	0.08	15	33.60	63	85	51	0	0	2	1
	RALEIGH	60	34	63	29	47	1	0.10	-0.55	0.06	0.04	11	45.72	113	88	35	0	2	2	0
	WILMINGTON	63	38	70	33	50	-2	0.08	-0.75	0.08	0.00	0	49.46	92	93	38	0	0	1	0
ND	BISMARCK	41	20	51	13	30	10	0.04	-0.06	0.02	0.04	80	16.07	98	77	60	0	7	2	0
	DICKINSON	34	18	43	10	26	4	0.01	-0.07	0.01	0.01	20	12.85	80	93	65	0	7	1	0
	FARGO	35	15	45	11	25	7	0.00	-0.11	0.00	0.00	0	24.98	121	87	58	0	7	0	0
	GRAND FORKS	32	10	44	-1	21	4	0.06	-0.08	0.05	0.06	100	20.45	107	88	64	0	7	2	0
	JAMESTOWN	36	16	45	10	26	7	0.00	-0.08	0.00	0.00	0	21.70	120	92	58	0	7	0	0
	WILLISTON	38	17	47	11	28	11	0.01	-0.12	0.01	0.01	14	12.65	93	86	65	0	7	1	0
OH	AKRON-CANTON	43	29	50	22	36	1	0.98	0.24	0.51	0.28	67	44.72	125	91	66	0	6	4	1
	CINCINNATI	47	30	52	23	39	0	0.48	-0.29	0.46	0.02	5	45.74	115	86	61	0	5	2	0
	CLEVELAND	44	31	50	25	38	2	0.77	-0.04	0.51	0.19	41	34.93	97	87	61	0	4	4	1
	COLUMBUS	46	30	51	24	38	0	0.79	0.04	0.62	0.13	31	46.20	128	86	58	0	6	3	1
	DAYTON	45	29	50	27	37	1	0.40	-0.35	0.34	0.05	12	40.23	109	90	62	0	6	3	0
	MANSFIELD	43	29	50	23	36	2	0.57	-0.28	0.47	0.10	21	41.60	103	96	66	0	5	2	0

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending December 4, 2004

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	42	29	47	25	36	2	0.49	-0.17	0.33	0.09	24	27.72	90	92	69	0	6	4	0
	YOUNGSTOWN	43	29	50	21	36	1	1.04	0.28	0.47	0.41	95	42.00	118	89	68	0	5	3	0
OK	OKLAHOMA CITY	53	29	59	24	41	-2	0.00	-0.42	0.00	0.00	0	36.33	106	87	42	0	5	0	0
	TULSA	52	30	61	28	41	-2	0.85	0.16	0.83	0.00	0	48.53	120	84	60	0	6	2	1
OR	ASTORIA	47	36	50	38	42	-2	1.06	-1.50	0.50	0.40	28	57.49	99	95	89	0	2	3	1
	BURNS	31	12	38	0	22	-5	0.01	-0.27	0.01	0.00	0	8.75	93	86	78	0	7	1	0
	EUGENE	43	32	51	27	38	-3	0.16	-1.93	0.06	0.06	5	27.53	63	96	91	0	3	4	0
	MEDFORD	41	28	47	23	35	-5	0.03	-0.70	0.03	0.00	0	15.17	96	97	83	0	6	1	0
	PENDLETON	44	30	47	25	37	1	0.13	-0.23	0.10	0.01	5	12.84	112	79	68	0	5	3	0
	PORTLAND	43	35	49	31	39	-3	0.45	-0.95	0.20	0.15	19	24.48	76	97	89	0	1	4	0
	SALEM	42	33	49	26	38	-4	0.29	-1.32	0.10	0.18	20	28.42	82	98	93	0	4	4	0
PA	ALLENTOWN	48	30	58	20	39	3	3.49	2.68	2.47	1.02	222	48.80	116	84	51	0	3	2	2
	ERIE	45	34	51	27	39	2	1.17	0.23	0.58	0.70	130	41.55	105	80	63	0	3	4	1
	MIDDLETOWN	50	34	59	25	42	4	1.24	0.41	0.65	0.65	138	50.26	133	88	45	0	3	3	1
	PHILADELPHIA	51	34	60	26	43	1	2.04	1.29	1.15	0.87	202	46.91	120	77	44	0	3	3	2
	PITTSBURGH	46	30	55	23	38	1	0.09	-0.62	0.07	0.00	0	54.00	153	88	54	0	4	2	0
	WILKES-BARRE	45	30	54	22	38	2	2.81	2.14	1.94	0.87	235	42.59	120	88	51	0	5	2	2
	WILLIAMSPORT	46	30	54	20	38	3	2.14	1.35	1.09	0.96	218	48.18	123	89	54	0	3	3	2
RI	PROVIDENCE	50	34	58	27	42	4	2.24	1.28	1.37	1.37	254	42.04	98	82	48	0	3	2	2
SC	BEAUFORT	65	43	69	36	54	0	0.00	-0.58	0.00	0.00	0	35.99	77	93	48	0	0	0	0
	CHARLESTON	65	41	70	34	53	-1	0.00	-0.63	0.00	0.00	0	38.24	79	93	50	0	0	0	0
	COLUMBIA	61	34	65	30	48	-2	0.08	-0.55	0.08	0.08	22	38.27	85	95	44	0	2	1	0
	GREENVILLE	58	35	60	29	46	-1	0.25	-0.58	0.25	0.25	53	39.95	85	92	44	0	2	1	0
SD	ABERDEEN	41	17	48	8	29	8	0.02	-0.04	0.01	0.01	33	22.08	111	83	65	0	7	2	0
	HURON	43	20	52	12	31	8	0.00	-0.09	0.00	0.00	0	29.63	144	89	48	0	7	0	0
	RAPID CITY	43	17	55	1	30	3	0.01	-0.05	0.01	0.00	0	13.41	82	77	39	0	7	1	0
	SIOUX FALLS	41	19	51	13	30	7	0.00	-0.17	0.00	0.00	0	30.85	127	84	62	0	7	0	0
TN	BRISTOL	53	28	58	22	41	0	0.73	-0.06	0.49	0.24	55	45.55	119	94	50	0	6	2	0
	CHATTANOOGA	58	37	62	29	47	1	0.84	-0.32	0.84	0.00	0	53.59	106	87	50	0	3	1	1
	KNOXVILLE	55	34	60	26	44	0	1.34	0.32	1.11	0.23	40	50.96	115	92	52	0	4	2	1
	MEMPHIS	57	36	62	30	47	0	1.87	0.39	1.07	0.00	0	49.45	99	88	45	0	1	2	2
	NASHVILLE	55	34	62	27	44	0	2.08	0.97	1.90	0.00	0	53.32	121	88	45	0	4	2	1
TX	ABILENE	57	32	62	26	45	-3	0.00	-0.23	0.00	0.00	0	36.72	162	80	54	0	4	0	0
	AMARILLO	48	22	62	15	36	-3	0.00	-0.08	0.00	0.00	0	25.78	135	81	38	0	6	0	0
	AUSTIN	65	36	83	26	51	-4	0.36	-0.16	0.36	0.01	3	52.80	168	84	52	0	2	2	0
	BEAUMONT	66	45	77	36	56	-1	0.30	-0.83	0.21	0.21	32	58.10	105	92	53	0	0	3	0
	BROWNSVILLE	76	58	86	50	67	4	0.68	0.39	0.62	0.66	413	28.96	109	90	71	0	0	3	1
	CORPUS CHRISTI	68	52	85	38	61	0	0.06	-0.29	0.06	0.00	0	34.39	112	88	65	0	0	1	0
	DEL RIO	65	41	80	32	53	-2	0.02	-0.15	0.01	0.01	11	30.62	174	87	55	0	1	2	0
	EL PASO	54	33	63	22	43	-4	0.16	0.01	0.16	0.16	178	11.93	136	73	27	0	4	1	0
	FORT WORTH	59	35	63	30	47	-3	0.47	-0.05	0.33	0.00	0	47.01	145	85	46	0	2	3	0
	GALVESTON	68	54	79	44	61	0	0.13	-0.70	0.11	0.11	24	45.24	111	86	56	0	0	2	0
	HOUSTON	64	45	78	35	55	-1	0.34	-0.52	0.24	0.02	4	63.10	141	91	61	0	0	3	0
	LUBBOCK	54	26	62	22	40	-2	0.00	-0.14	0.00	0.00	0	31.22	173	82	45	0	6	0	0
	MIDLAND	55	31	61	24	43	-4	0.00	-0.13	0.00	0.00	0	22.46	158	80	47	0	4	0	0
	SAN ANGELO	59	33	69	25	46	-3	0.00	-0.19	0.00	0.00	0	30.12	150	81	51	0	4	0	0
	SAN ANTONIO	67	44	80	32	55	0	0.11	-0.33	0.09	0.01	4	45.38	145	82	47	0	1	3	0
	VICTORIA	66	46	82	35	56	-2	0.22	-0.33	0.08	0.08	26	71.99	190	90	62	0	0	4	0
	WACO	61	37	76	30	49	-2	0.16	-0.46	0.15	0.01	3	58.20	188	90	57	0	1	2	0
	WICHITA FALLS	57	31	61	24	44	-2	0.09	-0.26	0.08	0.00	0	36.75	134	88	54	0	5	2	0
UT	SALT LAKE CITY	30	19	33	13	25	-8	0.01	-0.27	0.01	0.00	0	14.31	93	82	55	0	7	1	0
VT	BURLINGTON	41	26	50	15	34	4	1.49	0.90	0.73	0.84	255	35.82	105	86	61	0	5	3	2
VA	LYNCHBURG	54	30	56	24	42	0	0.47	-0.25	0.32	0.32	78	35.25	87	84	41	0	6	2	0
	NORFOLK	57	38	67	32	48	0	0.25	-0.37	0.24	0.01	3	47.75	111	92	52	0	1	2	0
	RICHMOND	58	36	64	30	47	3	0.39	-0.26	0.19	0.19	51	56.31	137	82	43	0	2	3	0
	ROANOKE	53	35	58	29	44	2	0.44	-0.25	0.29	0.15	38	46.42	116	75	45	0	1	2	0
	WASH/DULLES	53	31	57	24	42	2	0.79	0.08	0.34	0.33	80	36.15	92	89	42	0	4	3	0
WA	OLYMPIA	43	33	49	25	38	-1	0.70	-1.25	0.31	0.37	33	36.18	82	97	87	0	3	5	0
	QUILLAYUTE	45	36	47	29	41	-1	3.19	-0.31	1.78	2.84	143	76.15	85	99	95	0	2	7	2
	SEATTLE-TACOMA	44	37	47	29	40	-2	0.40	-1.01	0.17	0.17	21	27.45	85	93	82	0	1	3	0
	SPOKANE	34	24	37	17	29	0	0.12	-0.44	0.10	0.00	0	13.93	95	93	70	0	7	2	0
	YAKIMA	39	18	46	11	28	-3	0.00	-0.29	0.00	0.00	0	7.56	107	89	79	0	7	0	0
WV	BECKLEY	47	28	53	22	38	-1	1.23	0.54	0.71	0.48	123	47.73	123	79	54	0	6	3	1
	CHARLESTON	52	31	61	24	42	1	1.08	0.24	0.71	0.31	66	52.81	128	91	50	0	4	3	1
	ELKINS	49	27	57	18	38	2	1.08	0.27	0.51	0.49	107	51.25	119	89	47	0	5	3	1
	HUNTINGTON	50	31	57	24	41	0	0.92	0.15	0.91	0.00	0	51.43	131	89	57	0	5	2	1
WI	EAU CLAIRE	36	17	44	10	26	3	0.01	-0.30	0.01	0.01	6	30.71	98	90	62	0	7	1	0
	GREEN BAY	38	23	46	12	30	4	0.03	-0.38	0.03	0.00	0	31.83	114	86	62	0	7	1	0
	LA CROSSE	39	21	48	16	30	3	0.00	-0.37	0.00	0.00	0	40.20	128	92	59	0	7	0	0
	MADISON	40	24	48	18	32	4	0.01	-0.45	0.01	0.01	4	38.12	121	86	60	0	7	1	0
	MILWAUKEE	39	27	43	21	33	2	0.27	-0.31	0.27	0.00	0	31.54	96	80	63	0	6	1	0
WY	CASPER	26	11	39	-8	19	-7	0.01	-0.13	0.01	0.00	0	9.86	79	73	64	0	7	1	0
	CHEYENNE	31	12	44	-3	22	-7	0.03	-0.08	0.02	0.00	0	13.10	87	65	50	0	7	2	0
	LANDER	22	4	30	-8	13	-11	0.20	0.04	0.20	0.00	0	13.70	106	83	67	0	7	1	0
	SHERIDAN	38	12	53	-1	25	0	0.09	-0.05	0.09	0.00	0	9.79	69	73	53	0	7	1	0

Based on 1971-2000 normals

*** Not Available

NOTE: These data are preliminary and subject to change. In the past, precipitation totals from a number of stations have been incomplete.

November Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Incessant precipitation on the southern Plains stressed livestock, threatened open-boll cotton, and limited fieldwork, including cotton, sorghum, and peanut harvesting. Wet weather across the southern Corn Belt and much of the South also hampered fieldwork, including winter wheat planting and final summer crop harvesting. Especially wet conditions prevailed from the western Gulf Coast region to the Delta, where monthly rainfall locally in excess of one foot caused lowland flooding and left standing water in some fields. In contrast, mostly dry weather across the upper Midwest promoted late-season corn and sunflower harvesting. Generally dry conditions also prevailed on the northern High Plains, where mild weather favored winter wheat development, despite limited soil moisture reserves. Elsewhere on the Plains, soil moisture remained adequate to locally excessive in key winter wheat areas. From the Rockies westward, meanwhile, stormy weather in the Great Basin and the Four Corners States contrasted with drier-than-normal conditions in the Northwest. Southwestern storminess continued to provide limited relief from a multi-year drought, but meager high-elevation snowpacks became an increasing concern in the northern Rockies. Late in the month, back-to-back snowstorms disrupted pre-Thanksgiving travel in the Midwest and post-holiday travel from the Intermountain West to the central Plains, respectively.

Cool, unsettled weather in the Southwest contrasted with mild, mostly dry weather across the northern Plains and upper Midwest. Monthly temperatures averaged as much as 6°F below normal in southern California, but ranged from 4 to 8°F above normal from Montana to the upper Mississippi Valley. The Southwestern chill was most pronounced toward month's end, when freezes as far south as California's Imperial Valley forced some winter crop producers to take protective measures, including the activation of sprinkler systems, to guard against damage. East of the Rockies, cooler-than-normal weather (as much as 4°F below normal) was confined to the southern High Plains, while near-normal temperatures were observed along the Atlantic Seaboard. Readings generally ranged from 2 to 6°F above normal from the central Gulf Coast region northward to the Great Lakes States.

In late November and early December, cold air trailing a post-Thanksgiving storm resulted in more than 200 daily-record lows from the Plains westward. In addition, monthly record lows were set or tied on November 30 in several locations, including Imperial, CA (32°F, equaling the record set on November 17, 1958); Santa Barbara, CA (30°F, equaling the record set on November 19, 2000, and on several earlier dates); and Grand Junction, CO (-4°F, breaking the record of -2°F established on November 28, 1976). Grand Junction also achieved daily-record lows (2, -4, -2, 0, 0, and 2°F) on 6 consecutive days from November 29 - December 4, its second-longest such streak behind a 10-day cold snap in February 1903. November 30 featured the month's coldest weather in locations such as Alamosa, CO (-20°F), and Alliance, NE (-18°F). Farther west, Bakersfield, CA, reported freezes (30, 29, 27, 28, 28, and 28°F) on 6 consecutive mornings from November 29 - December 4, setting or tying records each day. Another California location noting six consecutive freezes and daily-record lows was Salinas (27, 30, 30, 30, 31, and 29°F). In addition to the spate of record lows, Cedar City, UT (22°F on November 29), was among the locations noting its lowest maximum temperature on record for November (previously 23°F on November 14, 1964, and November 19, 1956).

In contrast, McAllen, TX, posted a daily-record high of 92°F on November 29, its second-warmest reading of the month behind a high of 94°F on November 1. Farther north, early-month warmth was also impressive in the East and Midwest. Monthly record highs were set or tied in locations such as Asheville, NC (81°F on November 1), and Jackson, KY (82°F on November 2). In Iowa, Sioux City's high of 80°F on November 6 marked its second-latest autumn observance of a maximum temperature of 80°F or higher, behind November 8, 1999. In Minneapolis, MN, below-normal temperatures prevailed on only 2 days (November 11 and 12) during the month. Meteorological autumn ended in Minneapolis with average temperatures equal to or greater than normal on 40 of 42 days (October 20 - November 30), capping its sixth-warmest fall (51.7°F, or 3.6°F above normal) on record. Similarly, Marquette, MI (46.9°F, or 4.6°F above normal), completed its second-warmest autumn behind 47.3°F in 1963.

Late-season warmth resulted in some unusually late first-freeze dates across the South. Jackson, TN, noted its latest first freeze on record with a low of 29°F on November 28, erasing a standard established on November 17, 1988. It was the second-latest first freeze on record in several locations, including London, KY (31°F on November 9), and Huntsville, AL (32°F on November 26). Huntsville's latest first autumn freeze on record occurred on December 5, 1978.

Some of the South's heaviest rain fell around midmonth, when November 13-17 totals in western Texas included 3.93 inches in Midland and 4.35 inches in Lubbock. A few days later, Victoria, TX, measured daily-record totals (6.94, 2.38, and 1.56 inches) on 3 consecutive days from November 20-22. By month's end, records were established in Victoria for both November (16.14 inches) and annual rainfall (71.79 inches), eclipsing standards established in 1998 (10.11 inches) and 1997 (67.18 inches), respectively. In the western Gulf Coast region, some river basins were overwhelmed by the heavy rainfall. For example, major flooding was reported along the San Antonio River at Goliad, TX, where a crest of 8.86 feet above flood stage was topped by a crest 15.42 feet above flood stage on November 27. November precipitation records were established in several locations across the South, including:

Record-High November Precipitation (Inches)

Location	Total	Normal	Previous Record
Victoria, TX	16.14	2.64	10.11 in 1998
Pinson, AL	14.13	4.88	not available
Austin (Mabry), TX	14.10	2.68	10.00 in 2001
Jasper, AL	10.84	4.69	9.87 in 2000
San Antonio, TX	9.46	2.58	9.16 in 1874
Wichita Falls, TX	6.86	1.68	5.69 in 1957
Lubbock, TX	6.65	0.71	3.45 in 2001
Midland, TX	5.42	0.65	2.32 in 1968
Del Rio, TX	4.71	0.96	4.54 in 1913
Hanksville, UT	2.63	0.41	1.67 in 1957

Significant dry spots east of the northern Rockies were generally limited to the northern Plains, upper Midwest, and southern Florida, where Miami (0.34 inch, or 10 percent of normal) noted its seventh-driest November. Farther north, locations reporting November totals that were less than one-tenth of an inch and less than 10 percent of normal included Billings, MT (0.06 inch), Fargo, ND (0.05 inch), and Rapid City, SD (0.01 inch).

Propelled by the third-greatest November tornado outbreak on record, the Nation's preliminary tornado count reached 115, according to the Storm Prediction Center. More than 75 tornadoes struck the South (from eastern Texas to the southern Atlantic States) from November 22-24, ranking behind outbreaks on November 23-24, 1992, and November 9-11, 2002. Severe thunderstorms during November have been fairly common in recent years; the Nation's final monthly count in November 2002 was 98 tornadoes, and there were 112 tornadoes reported in November 2001. There were three fatalities associated with the 2004 outbreak (one apiece in Texas, Louisiana, and Mississippi) from the afternoon of November 23 into the pre-dawn hours of the following day.

During November, Western precipitation was abundant in the Great Basin and the Four Corners States, but scarce across the West Coast States and the northern Rockies. In western Colorado, Grand Junction received well-above-normal precipitation (1.86 inches, or 262 percent of normal) and snowfall (10.5 inches, or 457 percent). In Nevada, 7.0 inches of snow blanketed Reno on November 27, while monthly rainfall reached 1.71 inches (552 percent of normal) in Las Vegas. In contrast, November rainfall totaled less than one-tenth of an inch (and less than 10 percent of normal) in locations such as Santa Barbara, CA, and Wenatchee, WA. Extremely dry conditions prevailed in much of Montana, where Missoula (0.20 inch, or 21 percent of normal) registered its driest November on record and Cut Bank (a trace, or 0.42 inch below normal) noted its driest November since 1953.

East of the Rockies, significant snow fell on several occasions, mostly in a band stretching northeastward from the central and southern High Plains. In northern Maine, most (9.7 inches) of Caribou's 11.3-inch month snowfall accumulated on November 5. It was Caribou's third-earliest snowfall of 8 inches or greater, behind 9.4 inches on October 29, 1963, and 8.4 inches on October 29, 2000. Farther south, the Blue Hill Observatory in Milton, MA, clocked a westerly wind gust to 69 m.p.h. on November 5. Snow was equally a factor in northern Texas and northern Maine. Snow fell on 4 November days in both Caribou and Amarillo, TX, totaling 13.8 inches (575 percent of normal) in the latter location. The majority of Amarillo's snow fell on November 2 (8.4 inches) and 13 (4.4 inches), propelling the Texas city to its snowiest November on record (previously, 13.6 inches in 1952). Elsewhere, the day before Thanksgiving (November 24) featured daily-record snowfall totals in locations such as Grand Rapids, MI (9.7 inches); Peoria, IL (5.8 inches); and South Bend, IN (5.0 inches). Peoria received more snow on only two earlier autumn dates: November 6, 1951 (6.5 inches), and November 17, 1926 (6.2 inches). Another snow storm arrived following the Thanksgiving holiday, striking from the central Plains westward. On November 28, daily-record totals in Utah included 25.0 inches at Brian Head, 12.0 inches in Nephi, and 11.0 inches in Fillmore. Farther east, daily totals reached 13.0 inches in Lander, WY, and 9.9 inches in North Platte, NE. North Platte's total represented its snowiest day since March 28, 1980, when 11.6 inches fell. On the central High Plains, snow lingered into November 29, when Dodge City, KS (5.5 inches), received a daily-record total.

Areas north and west of the primary snow bands were remarkably free of wintry conditions. Monthly snowfall was 5 percent of normal or less in locations such as Buffalo, NY (0.2 inch), and Minneapolis, MN (0.5 inch). In Wisconsin, Green Bay's season-to-date snowfall stood at a trace, while Huron, SD, continued to await its first flake of snow. Huron's former record for the date of the season's latest first trace of snow was November 26, 2001. Elsewhere in South Dakota, the season's first measurable snow (0.4 inch) fell in Rapid City on November 23, narrowly missing its record-late date of November 24, 1952. In addition, Rapid City's monthly precipitation of 0.01 inch (0.60 inch below normal) represented its driest November since 1939, when only a trace fell.

Mild weather in Alaska helped to boost monthly temperatures as much as 9°F above normal. The month ended on an especially warm note, featuring a daily-record high of 50°F on November 28 in Cold Bay. Significant precipitation was confined to southern Alaska, where monthly totals reached 11.62 inches (175 percent of normal) in Kodiak, 9.56 inches (174 percent) in Valdez, and 8.38 inches (155 percent) in Juneau. While Juneau's monthly snowfall totaled just 1.9 inches (15 percent of normal), far below its November 2003 total of 20.6 inches, Valdez measured 69.7 inches.

In Hawaii, the month opened in the midst of a wet spell that boosted 10-day rainfall totals as high as 16.80 inches on Oahu at the Manoa Lyon Arboretum. Elsewhere on Oahu, Honolulu netted 4.93 inches of rain on November 4-5 and received 5.95 inches in a 4-day period ending November 7. Heavy rain returned at midmonth, when 48-hour totals on the Big Island included 9.97 inches in Honokaa and 7.13 inches in Mountain View. On Maui, West Wailuaiki received 13.71 inches on November 14. However, showers continued to bypass some areas, including Kahului, Maui. Kahului completed its third consecutive month with record-low rainfall, measuring just a trace (2.17 inches below normal) during November.

Fieldwork

Fieldwork summary provided by USDA/NASS

Above-normal temperatures prevailed across most of the Nation. Only in the central and southern High Plains, the Southwest, and parts of the Pacific Northwest were temperatures below normal. Heavy rainfall severely hampered fieldwork in the southern Great Plains, where summer crop harvesting trailed the normal progress. Heavy rain also limited fieldwork in the Mississippi Delta and adjacent areas of the Southeast. The southern Atlantic Coast was mostly dry, favoring cotton and peanut harvesting, while moderate precipitation fell in the central and northern Atlantic Coast States. Mostly dry conditions prevailed across the northern Great Plains and northern Corn Belt, but harvest continued to lag well behind normal due to delayed crop development and maturation. Across the central Corn Belt, corn and soybean harvesting proceeded at a near-normal pace, with only minor delays from moderate rainfall. Snow began to accumulate in the northern and central Rocky Mountains and the Great Basin. Moderate to heavy precipitation fell in the coastal areas of the Pacific Northwest, while the crop-producing areas further inland were mostly dry, allowing winter wheat planting to progress at or near the normal pace.

Less than two-thirds of the Nation's corn crop was harvested at the beginning of the month, mostly due to delayed development in the northern Great Plains and northern Corn Belt. By month's end, harvest had advanced to 95 percent complete, compared with 99 percent for last year and the 5-year average. At that time, harvest was complete in the Southeast and Texas and nearly complete in most other States. However, progress continued to lag behind in the northern Great Plains and northern Corn Belt. With just 75 percent of their acreage harvested as of November 28, North Dakota growers were over 4 weeks behind their normal pace. Harvest was also 3 weeks behind normal in Minnesota and 2 weeks behind in Wisconsin.

The sorghum crop reached 95 percent mature on November 7, two percentage points ahead of last year but 3 points behind the 5-year average. Maturation was at or near completion everywhere except New Mexico, Oklahoma, and Texas. Harvest continued to lag well behind normal during November. At month's end, 85 percent of the acreage had been harvested, 7 points behind last year and 11 points behind normal. Progress was 3 weeks behind normal nationwide and at least 1 week behind in all States, except Arkansas and Louisiana, where harvest was complete before the end of October. Colorado, Kansas, and Missouri growers were 3 weeks behind normal, while Oklahoma and Texas producers trailed their normal harvest pace by 4 weeks.

On November 21, 95 percent of the winter wheat crop had been planted, 3 points behind last year and 1 point behind normal. Planting was complete across the Pacific Northwest, Rocky Mountains, and northern and central Great Plains, and nearly complete in the Corn Belt. In Arkansas and Missouri, however, just 73 percent of the acreage had been planted, 17 and 22 points behind normal, respectively. Emergence progressed ahead of the normal pace throughout the month. By November 28, 93 percent of the crop had emerged, 1 point behind last year but 2 points ahead of the 5-year national average. Although emergence trailed 1 week behind normal in Arkansas, Illinois, Indiana, and Missouri, progress was at or ahead of normal in most other States.

The soybean harvest continued to trail the normal pace, reaching 95 percent complete on November 21, three points behind last year and the 5-year average. At that time, growers in Iowa, Louisiana, Mississippi, Nebraska, and South Dakota had finished harvesting their crop at or ahead of the normal pace. However, progress was behind normal in most other States, with Kansas, Missouri, and Tennessee producers trailing their normal harvest pace by 10 points.

Harvesting of sunflower progressed rapidly during the month. On October 31, just 25 percent of the acreage had been harvested, compared with 89 percent last year and 76 percent for the 5-year average. However, harvest had advanced to 92 percent complete by month's end, just 8 points behind last year and 5 points behind normal. Colorado growers had completed harvesting their acreage ahead of the normal pace, but progress was behind normal across the Great Plains. In Kansas, only 85 percent of the acreage had been harvested by month's end, 3 weeks behind normal.

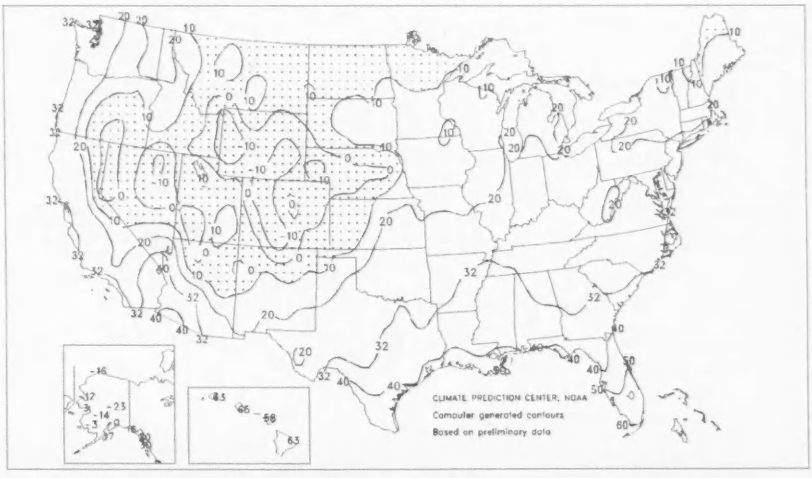
Ninety-five percent of the Nation's peanut acreage had been harvested by the end of the month, 3 points behind last year and 2 points behind normal. Harvest was nearly complete across the Southeast, with only Florida growers having fields left to be harvested. In the southern Great Plains, however, harvest was hampered by heavy rainfall and lagged behind normal. Texas producers had harvested just 75 percent of their acreage, compared with 92 percent last year and 85 percent for the average.

On November 7, bolls were open on 95 percent of the cotton acreage, 2 points behind last year and 4 points behind normal. Boll opening was complete or nearly completed in all States, except Texas, where only 88 percent of the crop had open bolls, compared with the normal 98 percent. Harvest progressed slowly during the month, advancing just 22 points. By month's end, 75 percent of the acreage was harvested, compared with 83 percent last year and 85 percent for the 5-year average. In the southern Great Plains, harvest was hampered by heavy rainfall and wet conditions, lagging 3 weeks behind normal in Oklahoma and 4 weeks behind in Texas. Harvest also lagged slightly behind normal in the Southwest. However, Louisiana and Mississippi growers had completed harvesting their crops, and progress was slightly ahead of normal across most of the Southeast.

The sugarbeet harvest was 96 percent complete on November 7, two points behind last year and 1 point behind normal. Harvest was nearly complete in the Red River Valley, where Minnesota and North Dakota growers had harvested 99 percent of their acreage. Harvest was 92 percent complete in Idaho and 86 percent complete in Michigan.

Extreme Minimum Temperature (°F)

November 2004

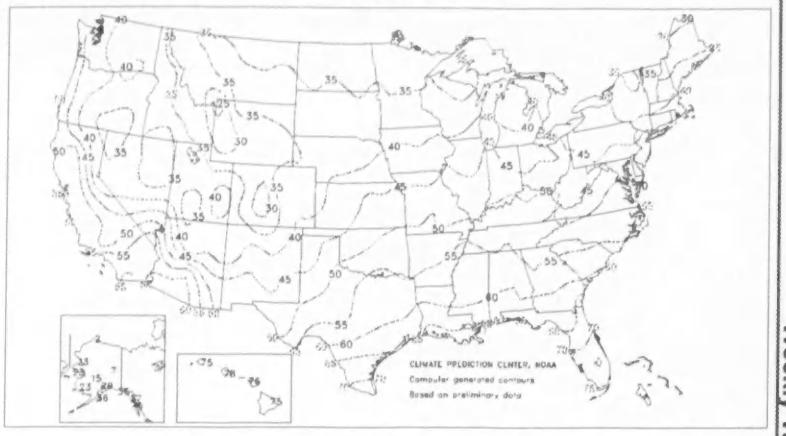


Total Precipitation (Inches)

November 2004

Average Temperature (°F)

November 2004



Percent Of Normal Precipitation

November 2004

Departure of Average Temperature from Normal (°F)

November 2004

TEMPERATURE AND PRECIPITATION SUMMARY
November 2004

STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	58	5	11.54	6.91
HUNTSVILLE	58	5	7.61	2.39
MOBILE	63	4	8.48	3.07
MONTGOMERY	62	6	6.94	2.41
AK ANCHORAGE	29	7	2.63	1.54
BARROW	2	3	0.28	0.12
COLD BAY	36	1	6.78	1.99
FAIRBANKS	7	5	0.63	-0.05
JUNEAU	37	4	8.38	2.95
KING SALMON	30	7	2.57	1.03
KODIAK	36	2	11.62	4.99
NOME	23	6	1.37	0.09
AZ FLAGSTAFF	35	-2	3.10	1.24
PHOENIX	61	-1	0.52	-0.21
TUCSON	56	-3	0.44	-0.23
AR FORT SMITH	54	3	7.91	3.11
LITTLE ROCK	55	3	10.31	4.58
CA BAKERSFIELD	52	-3	0.18	-0.41
EUREKA	47	-4	1.87	-3.91
FRESNO	52	-1	0.81	-0.29
LOS ANGELES	59	-3	0.11	-1.02
REDDING	53	2	1.69	-2.34
SACRAMENTO	51	-2	2.75	0.56
SAN DIEGO	60	-2	0.33	-0.74
SAN FRANCISCO	55	0	1.22	-1.27
STOCKTON	52	-1	1.96	0.19
CO ALAMOSA	30	2	0.28	-0.20
CO SPRINGS	36	0	0.65	0.13
DENVER	37	0	0.45	-0.15
GRAND JUNCTION	38	0	1.87	1.16
PUEBLO	39	1	0.58	0.00
CT BRIDGEPORT	47	2	3.33	-0.32
HARTFORD	42	0	2.68	-1.38
DC WASHINGTON	51	2	4.51	1.48
DE WILMINGTON	47	1	5.23	2.04
FL DAYTONA BEACH	69	2	0.93	-2.10
FT LAUDERDALE	75	1	1.32	-3.25
FT MYERS	72	0	1.10	-0.61
JACKSONVILLE	64	2	2.91	0.57
KEY WEST	77	1	2.27	-0.37
MELBOURNE	70	1	1.21	-1.91
MIAMI	75	1	0.34	-3.09
ORLANDO	70	1	2.18	-0.14
PENSACOLA	64	3	9.26	4.80
ST PETERSBURG	71	1	1.39	-0.65
TALLAHASSEE	62	2	2.60	-1.26
TAMPA	70	1	0.73	-0.89
WEST PALM BEACH	73	0	1.18	-4.37
GA ATHENS	55	2	7.95	4.24
ATLANTA	56	3	7.26	3.16
AUGUSTA	56	2	3.69	1.01
COLUMBUS	59	2	5.61	1.64
MACON	59	4	3.68	0.46
SAVANNAH	60	1	1.12	-1.28
HI HILO	75	1	11.08	-4.50
HONOLULU	78	0	7.88	5.62
KAHULUI	76	0	0.00	-2.17
LIHUE	75	-1	4.82	0.12
ID BOISE	38	-2	0.70	-0.68
LEWISTON	42	2	1.00	-0.21
POCATELLO	33	-2	0.48	-0.65
IL CHICAGO/O'HARE	44	5	3.49	0.48
MOLINE	44	5	2.75	0.02
PEORIA	44	4	4.07	1.08
ROCKFORD	42	5	3.03	0.40
SPRINGFIELD	46	4	4.91	2.04
IN EVANSVILLE	50	4	6.24	2.06
FORT WAYNE	43	2	3.38	0.40
INDIANAPOLIS	47	4	5.14	1.53
SOUTH BEND	42	2	4.56	1.17
IA BURLINGTON	47	6	3.31	0.59
CEDAR RAPIDS	41	4	2.33	0.09
DES MOINES	42	4	2.53	0.43
DUBUQUE	40	4	2.00	-0.49
SIOUX CITY	39	4	1.45	0.05
WATERLOO	40	5	2.20	0.10
KS CONCORDIA	44	3	1.14	-0.31
DODGE CITY	42	0	2.34	1.33
GOODLAND	39	2	2.10	1.28
HILL CITY	42	2	0.81	0.07
TOPEKA	46	3	2.45	0.14
WICHITA	47	3	2.55	0.73
KY JACKSON	53	5	4.48	0.28
LEXINGTON	49	3	7.32	3.88
LONDON-CORBIN	51	4	6.86	2.96
LOUISVILLE	51	3	6.66	2.86
PADUCAH	51	4	7.04	2.51
LA BATON ROUGE	63	4	6.60	1.84
LAKE CHARLES	64	4	7.08	2.47
NEW ORLEANS	65	4	7.43	2.34
SHREVEPORT	59	3	7.17	2.49
ME BANGOR	36	-1	4.32	0.63
CARIBOU	30	-1	3.27	0.15
PORTLAND	39	1	4.04	-0.68
MD BALTIMORE	48	2	5.03	1.91
MA BOSTON	44	-1	2.91	-1.07
WORCESTER	40	0	3.93	-0.41
MI ALPENA	38	3	1.61	-0.47
DETROIT	43	2	3.21	0.55
FLINT	40	2	2.30	-0.35
GRAND RAPIDS	40	2	4.03	0.68
HOUGHTON LAKE	36	1	1.59	-0.55
LANSING	40	2	4.02	1.36
MUSKEGON	41	2	3.15	-0.08
TRAVERSE CITY	39	2	1.84	-1.03
MN DULUTH	33	5	0.49	-1.63
INT'L FALLS	31	7	0.31	-1.05
MINNEAPOLIS	38	5	0.93	-1.01
ROCHESTER	36	5	1.49	-0.52
ST. CLOUD	35	6	0.54	-1.00
MS JACKSON	59	4	8.15	3.11
MERIDIAN	59	3	10.63	5.68
TUPELO	57	6	8.84	3.83
MO COLUMBIA	47	4	5.42	1.95
JOPLIN	50	3	6.56	2.50
KANSAS CITY	47	4	2.89	0.39
SPRINGFIELD	49	3	7.28	2.82
ST JOSEPH	44	2	1.52	-0.64
ST LOUIS	49	4	5.74	2.03
MT BILLINGS	40	6	0.09	-0.66
BUTTE	30	3	0.07	-0.53
GLASGOW	33	5	0.35	-0.04
GREAT FALLS	37	5	0.16	-0.43
HELENA	36	5	0.10	-0.38
KALISPELL	33	2	0.65	-0.80
MILES CITY	37	5	0.13	-0.39
MISSOULA	34	2	0.20	-0.76
NE GRAND ISLAND	40	4	2.00	0.59
HASTINGS	41	4	1.98	0.49
LINCOLN	42	4	2.81	1.03
MCCOOK	41	3	1.76	0.67
NORFOLK	39	4	2.08	0.64
NORTH PLATTE	38	3	1.11	0.35
OMAHA/EPPLEY	42	4	2.02	0.20
SCOTTSBLUFF	35	1	1.36	0.56
VALENTINE	37	4	0.43	-0.29
NV ELKO	35	0	0.87	-0.18
ELY	33	0	0.96	0.33
LAS VEGAS	54	-1	1.71	1.40
RENO	40	-1	1.53	0.73
WINNEMUCCA	36	-1	1.29	0.49
NH CONCORD	39	1	3.22	-0.35
NJ ATLANTIC CITY	47	1	4.42	1.16
NEWARK	47	1	4.37	0.49
NM ALBUQUERQUE	45	1	1.37	0.75
NY ALBANY	39	0	3.04	-0.24
BINGHAMTON	39	1	3.00	-0.32
BUFFALO	42	2	2.92	-1.00
ROCHESTER	41	1	2.31	-0.53
SYRACUSE	41	1	2.81	-0.96
NC ASHEVILLE	51	5	5.02	1.20
CHARLOTTE	53	1	3.13	-0.23
GREENSBORO	52	3	4.59	1.63
HATTERAS	58	0	4.25	-0.68
RALEIGH	53	2	3.89	0.92
WILMINGTON	57	1	3.18	-0.08
ND BISMARCK	35	7	0.14	-0.56
DICKINSON	34	5	0.26	-0.33
FARGO	34	7	0.05	-1.01
GRAND FORKS	32	6	0.11	-0.88
JAMESTOWN	33	6	0.03	-0.68
MINOT	35	8	0.18	-0.68
WILLISTON	33	7	0.12	-0.53
OH AKRON-CANTON	43	2	3.14	0.10
CINCINNATI	47	2	5.35	1.89
CLEVELAND	44	2	3.24	-0.14
COLUMBUS	46	2	4.12	0.93
DAYTON	45	3	3.19	-0.11
MANSFIELD	43	3	3.29	-0.47
TOLEDO	43	3	3.31	0.53
YOUNGSTOWN	43	2	2.46	-0.61
OK OKLAHOMA CITY	51	2	5.67	3.56
TULSA	52	2	3.92	0.45
OR ASTORIA	47	0	6.71	-3.79
BURNS	35	2	0.38	-0.73
EUGENE	44	-1	2.21	-6.23
MEDFORD	43	-1	1.71	-1.22
PENDLETON	43	2	0.88	-0.75
PORTLAND	46	0	2.40	-3.21
SALEM	44	-1	2.14	-4.25
PA ALLENTOWN	44	2	4.95	1.28
ERIE	44	1	2.96	-1.00
MIDDLETOWN	48	4	2.85	-0.67
PHILADELPHIA	48	1	4.55	1.39
PITTSBURGH	46	4	3.19	0.17
WILKES-BARRE	42	0	3.60	0.48
WILLIAMSPORT	44	3	3.54	-0.08
PR SAN JUAN	79	-1	8.44	2.27
RI PROVIDENCE	43	-1	4.40	0.00
SC CHARLESTON	60	2	1.41	-1.25
COLUMBIA	56	1	2.31	-0.57
FLORENCE	56	1	3.86	1.27
GREENVILLE	54	3	3.56	-0.23
MYRTLE BEACH	58	1	2.50	-0.47
SD ABERDEEN	34	5	0.31	-0.44
HURON	37	6	0.27	-0.62
RAPID CITY	37	4	0.04	-0.57
SIOUX FALLS	37	6	0.81	-0.55
TN BRISTOL	50	4	3.70	0.62
CHATTANOOGA	54	4	7.61	2.73
JACKSON	54	4	8.84	3.77
KNOXVILLE	53	4	6.00	2.02
MEMPHIS	57	5	9.38	3.62
NASHVILLE	54	5	5.21	0.76
TX ABILENE	53	-1	5.12	3.82
AMARILLO	43	-2	4.06	3.38
AUSTIN	59	-1	14.10	11.42
BEAUMONT	63	2	9.34	4.59
BROWNSVILLE	72	4	1.82	0.07
COLLEGE STATION	60	0	9.24	6.06
CORPUS CHRISTI	68	3	1.25	-0.49
DALLAS/FT WORTH	57	2	5.01	2.44
DEL RIO	59	-1	4.71	3.75
EL PASO	51	-2	2.01	1.59
GALVESTON	67	2	7.80	4.16
HOUSTON	62	1	11.73	7.54
LUBBOCK	47	-1	6.65	5.94
MIDLAND	51	-1	5.48	4.83
SAN ANGELO	54	0	5.18	4.08
SAN ANTONIO	61	1	9.46	6.88
VICTORIA	63	0	16.14	13.50
WACO	58	1	9.73	7.12
WICHITA FALLS	54	2	6.86	5.18
UT SALT LAKE CITY	39	-1	1.24	-0.16
VT BURLINGTON	37	0	2.11	-0.95
VA LYNCHBURG	49	2	5.14	1.96
NORFOLK	53	1	2.66	-0.32
RICHMOND	53	4	3.27	0.21
ROANOKE	51	4	4.26	1.05
WASH/DULLES	48	3	4.13	0.82
WA OLYMPIA	43	1	3.90	-4.23
QUILLAYUTE	45	1	13.13	-1.69
SEATTLE-TACOMA	45	0	3.17	-2.73
SPOKANE	36	1	1.13	-1.11
YAKIMA	38	1	0.10	-0.95
WV BECKLEY	46	3	3.69	0.81
CHARLESTON	50	4	4.29	0.63
ELKINS	46	5	4.20	0.78
HUNTINGTON	50	4	5.94	2.62
WI EAU CLAIRE	37	5	1.60	-0.32
GREEN BAY	39	5	1.80	-0.47
LA CROSSE	39	4	1.90	-0.20
MADISON	40	5	1.51	-0.80
MILWAUKEE	42	4	2.38	-0.32
WAUSAU	36	4	1.41	-0.79
WY CASPER	33	1	0.56	-0.26
CHEYENNE	35	2	1.55	0.91
LANDER	32	2	0.40	-0.59
SHERIDAN	36	5	0.21	-0.59

Based on 1971-2000 normals.

*** Not Available.

Agricultural Weather Data Compiled by USDA's Stoneville Field Office

Weather Data for the Week Ending December 4, 2004

Data provided by the Mississippi State Delta Research and Extension Center (DREC) and the University of Missouri Extension Commercial Agriculture Program.

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							4-INCH SOIL TEMP., °F		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Dec 1	PCT. NORMAL SINCE Dec 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	01 INCH OR MORE	50 INCH OR MORE
MISSISSIPPI																				
	INDIANOLA 1S	58	37	69	32	47	-	1.22	-	0.86	0.87	-	64.71	-	-	-	0	0	3	1
	INVERNESS 5E	58	37	69	33	47	-	1.49	-	0.97	0.97	-	49.40	-	57	48	0	0	2	2
	LYON	58	35	67	29	47	-	1.77	-	1.20	1.20	-	45.88	-	55	46	0	1	2	2
	MACON	59	36	66	31	47	-	0.57	-	0.57	0.57	-	-	-	-	-	0	2	1	1
	ONWARD	59	37	71	34	48	-	1.34	-	1.33	1.33	-	57.05	-	-	-	0	0	2	1
	PERTHSHIRE	58	35	66	29	46	-	2.40	-	1.44	1.44	-	53.86	-	55	46	0	3	2	2
	SCOTT	57	38	69	33	48	-	1.72	-	1.05	1.05	-	-	-	-	-	0	0	2	2
	SIDON	60	38	70	34	49	-	2.06	-	1.86	1.86	-	45.84	-	63	48	0	0	2	1
	STARKVILLE	58	35	66	30	47	-2	1.35	0.22	1.34	1.35	167	53.31	104	56	49	0	1	2	1
	TUNICA 1W	55	34	63	27	45	-	2.20	-	2.20	2.20	-	-	-	-	-	0	3	1	0
	VANCE	57	36	67	31	46	-	2.17	-	1.48	1.48	-	49.43	-	-	-	0	1	2	2
	VERONA	58	34	64	29	46	-	1.47	-	1.47	1.47	-	46.34	-	57	45	0	4	1	1
	STONEVILLE [x]	60	36	70	33	48	0	1.99	0.73	1.79	1.99	221	62.20	128	59	47	0	0	2	1
MISSOURI																				
NW	CORNING	43	24	57	18	33	1	0.13	-0.34	0.13	0.00	0	22.32	64	-	-	0	7	1	0
	ALBANY	41	23	55	18	32	-2	0.24	-0.20	0.16	0.00	0	35.29	101	39	36	0	7	2	0
	ST. JOSEPH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NC	LINNEUS	41	25	57	19	33	-1	0.21	-0.19	0.16	0.17	96	40.04	114	40	38	0	6	3	0
	BRUNSWICK	43	29	57	23	35	0	0.11	-0.41	0.06	0.04	17	39.30	106	40	37	0	5	3	0
NE	NOVELTY	42	27	57	22	34	-1	0.30	-0.31	0.15	0.16	49	36.00	105	42	39	0	5	4	0
	MONROE CITY	43	29	57	24	35	0	0.20	-0.42	0.09	0.09	24	32.21	90	41	37	0	5	3	0
WC	GREEN RIDGE	45	29	57	25	36	0	0.10	-0.54	0.06	0.02	5	-	-	41	36	0	6	3	0
C	AUXVASSE	44	29	57	25	37	1	0.24	-0.26	0.10	0.07	21	39.76	107	42	38	0	5	3	0
	SANBORN FIELD	45	30	59	25	38	0	0.16	-0.58	0.07	0.05	12	42.42	109	42	37	0	5	3	0
	COLUMBIA	45	28	58	24	37	-1	0.20	-0.54	0.07	0.07	16	41.84	108	-	-	0	6	3	0
	VERSAILLES	46	30	59	25	38	-1	0.22	-0.52	0.17	0.01	2	-	-	42	37	0	4	3	0
EC	COOK STATION	50	28	60	21	38	-2	1.43	0.60	1.02	0.01	2	37.71	92	46	41	0	6	4	1
SW	LAMAR	47	30	56	25	38	-1	0.60	-0.10	0.54	0.01	3	45.34	100	43	39	0	6	3	1
SE	DELTA	49	32	56	27	40	-1	1.38	0.45	0.84	0.00	0	36.06	86	48	39	0	5	2	2
	CHARLESTON	49	33	55	29	41	0	1.26	0.47	0.66	0.00	0	31.42	73	49	40	0	5	2	2
	GLENNONVILLE	50	33	57	28	42	-1	1.07	0.16	0.61	0.00	0	36.63	93	48	42	0	4	2	1
	CLARKTON	51	33	58	28	42	-1	1.47	0.52	0.81	0.00	0	38.61	96	50	42	0	4	2	2
	PORTAGEVILLE DC	51	35	57	31	43	0	1.25	0.29	0.73	0.00	0	48.42	113	52	41	0	3	2	2
	PORTAGEVILLE LF	51	35	58	30	43	0	1.19	0.21	0.74	0.00	0	46.28	108	47	39	0	2	2	1
	STEELE	51	35	58	32	43	0	1.45	0.23	0.91	0.00	0	43.42	95	49	41	0	2	2	2
	CARDWELL	51	34	58	29	42	-2	1.77	0.76	1.27	0.00	0	46.90	104	50	46	0	4	2	2

Compiled by USDA/OCE/WAOB's Stoneville Field Office.

[x] **Based on 1971-2000 normals.**

- Sufficient data not available.

NW = Northwest; NC = North Central; NE = Northeast; WC = West Central; C = Central; EC = East Central; SW = Southwest; SE = Southeast.

Weather and Crop Summary for the Mississippi Delta: The Delta received notable amounts of rain early in the week and again at week's end, maintaining wet conditions, leaving additional standing water, and preventing fieldwork. In recent weeks, there have been limited opportunities to dry out between storm systems. In addition, cool weather lowered evaporation rates and many areas experienced their first freeze of the season. The early-December freeze, which followed highs near 70°F on November 29, did not appear to harm winter grains or other agricultural interests.

Note: For information on the weather stations in the Missouri Bootheel and recently added stations elsewhere in the State, please visit:

http://agebb.missouri.edu/weather/stations/index.htm

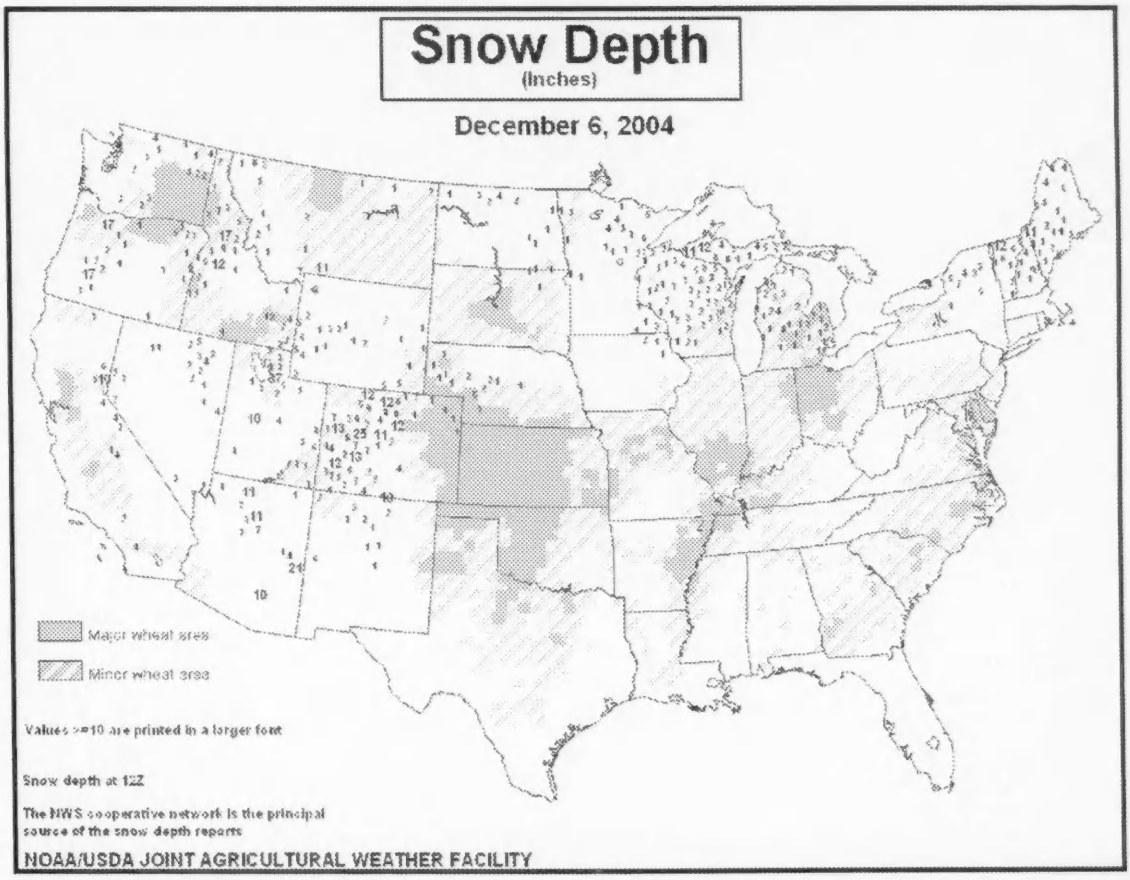
National Agricultural Summary

November 29 - December 5, 2004

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Warm, dry conditions prevailed across the northern Great Plains and northern Corn Belt, favoring final harvest of corn and soybeans. Elsewhere in the Corn Belt, temperatures were above normal, with light to moderate rainfall. In the central and southern Great Plains, temperatures averaged below normal and conditions were mostly dry, though lingering wetness from earlier rains continued to hamper harvest of summer crops in Texas. Temperatures were below normal in the Delta and neighboring areas of the Southeast, with moderate rainfall. In the southern Atlantic Coast States, conditions were cool and dry, while moderate precipitation and above-normal temperatures prevailed along the middle and northern Atlantic Coast. Light but widespread precipitation fell in the Rocky Mountains, where temperatures were well below normal. Further west, dry conditions and below-normal temperatures dominated the Pacific Northwest, Southwest, and Great Basin.


Snow Depth
(Inches)
December 6, 2004
Major wheat area
Minor wheat area
Values >=10 are printed in a larger font
Snow depth at 12Z
The NWS cooperative network is the principal source of the snow depth reports
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

International Weather and Crop Summary

November 28 - December 4, 2004

International Weather and Crop Highlights and Summaries provided by USDA/WAOB

HIGHLIGHTS

EUROPE: Much-needed rain favored winter grains establishment across France, Spain, and Italy, and winter crops continued to enter dormancy in Germany and Poland.

FSU-WESTERN: Above-normal temperatures favored dormant winter grains in Ukraine and most of the Southern Region in Russia, while an adequate snow cover protected crops from unseasonably cold weather in northern Russia.

AUSTRALIA: Mostly dry weather in western and southeastern Australia favored winter grain harvesting, while showers in northern New South Wales and Queensland locally benefited summer crops.

MIDDLE EAST: Cold weather stressed winter grains in central Turkey and prompted winter grains to begin entering dormancy across central Turkey and western Iran.

NORTHWESTERN AFRICA: Widespread rain favored winter grain germination in Morocco, but rain is needed across Algeria and Tunisia after 3 weeks of mostly dry weather.

SOUTH AFRICA: Welcomed rain stretched across the corn belt, benefiting germinating summer crops.

EASTERN ASIA: Light showers favored vegetative winter crops in China, while showers from Typhoon Nanmadol caused flooding in Taiwan and southern Japan.

SOUTHEAST ASIA: Heavy showers from Typhoon Nanmadol caused widespread flooding in the northern Philippines, while seasonably heavy showers in Indonesia boosted moisture supplies for main-season rice.

BRAZIL: Mostly dry weather promoted fieldwork in the south, and beneficial rain covered the northeastern interior and center-west Brazil.

ARGENTINA: Rain continued to boost soil moisture for summer crops but hampered wheat harvesting.

November 2004

MONTHLY DATA FROM SELECTED FOREIGN CITIES
CLIMATE PREDICTION CENTER-NCEP-NWS-NOAA

**** DATA NOT AVAILABLE*

COUNTRY	CITY	TEMPERATURE (C)						PRECIPITATION (MM)	
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	TOTAL	DPART F/NRM
NORWAY	OSLO	2	-4	10	-16	-1	-0.5	71	-17
SWEDEN	STOCKHOLM	4	0	11	-7	2	***	47	***
FINLAN	HELSINKI	2	-3	9	-14	-1	-0.9	63	-8
UKINGD	ABERDEEN	10	5	16	-8	7	1.5	50	-33
	MANCHESTER	***	***	9	7	***	***	***	***
	CARDIFF	12	8	15	2	10	1.0	52	-54
	LONDON	11	7	15	-1	9	0.9	29	-21
IRELAN	DUBLIN	10	6	13	0	8	0.8	39	-26
ICELAN	REYKJAVIK	4	1	11	-12	2	0.9	64	-18
DENMAR	COPENHAGEN	7	2	12	-5	5	-0.2	44	-1
LUXEMB	LUXEMBOURG	6	3	12	-3	5	0.5	43	-34
SWITZE	ZURICH	7	3	14	-4	5	0.6	20	-68
	GENEVA	9	4	16	-4	6	1.1	38	-46
FRANCE	PARIS/ORLY	10	6	14	-1	8	0.7	20	-28
	STRASBOURG	8	4	17	-5	6	0.8	28	-21
	BOURGES	10	5	14	-1	7	0.6	28	-35
	BORDEAUX	12	5	18	1	9	-0.2	9	-95
	TOULOUSE	11	4	18	0	8	-1.3	27	-22
	MARSEILLE	15	6	24	0	10	-0.2	12	-38
SPAIN	VALLADOLID	9	3	15	-2	6	-1.8	39	-9
	MADRID	15	3	19	-2	9	-1.2	22	-29
	SEVILLE	20	9	25	4	15	-0.7	8	-89
PORTUG	LISBON	17	10	22	6	14	-0.2	26	-76
GERMAN	HAMBURG	8	3	12	-4	5	0.2	96	26
	BERLIN	7	3	15	-2	5	0.5	56	12
	DUSSELDORF	9	3	15	-2	6	-0.6	86	24
	LEIPZIG	7	3	14	-3	5	0.3	68	32
	DRESDEN	7	3	15	-3	5	0.4	100	57
	STUTTGART	7	2	14	-5	5	0.2	30	-16
	NURNBERG	7	2	13	-6	4	0.4	43	-1
	AUGSBURG	6	2	14	-7	4	0.3	34	-18
AUSTRI	VIENNA	8	4	16	-7	6	1.6	35	-10
	INNSBRUCK	7	0	17	-7	3	0.1	32	-34
CZECHR	PRAGUE	7	2	14	-6	4	1.4	47	18
POLAND	WARSAW	6	2	15	-11	4	1.0	51	15
	LODZ	6	2	18	-11	4	1.1	68	27
	KATOWICE	7	2	19	-6	4	1.1	72	23
HUNGAR	BUDAPEST	9	4	19	-4	6	1.9	63	15
YUGOSL	BELGRADE	12	5	23	-3	8	1.8	129	75
ROMANI	BUCHAREST	11	2	21	-8	6	1.8	80	41
BULGAR	SOFIA	10	3	26	-7	7	2.2	44	1
ITALY	MILAN	14	5	23	-2	10	2.3	143	67
	VERONA	13	4	24	-4	9	1.8	74	9
	VENICE	14	5	23	-1	10	1.7	54	-16
	GENOA	16	11	23	6	14	1.3	126	24
	ROME	17	9	27	1	13	0.5	88	-8
	NAPLES	17	10	29	1	13	0.8	149	10
GREECE	THESSALONIKA	15	8	23	-1	11	0.6	36	-22
	LARISSA	16	6	24	-6	11	0.7	27	-44
	ATHENS	18	12	24	2	15	0.4	43	-25
TURKEY	ISTANBUL	15	10	23	-2	13	1.2	46	-35
	ANKARA	12	-1	23	-14	5	0.3	38	-3
CYPRUS	LARNACA	23	14	29	5	19	1.7	40	-13
ESTONI	TALLINN	3	-1	9	-10	1	0.3	69	0
RUSSIA	ST.PETERSBURG	1	-1	9	-11	0	0.0	44	-9
LITHUA	KAUNAS	3	0	11	-8	1	-0.5	43	-4
BELARU	MINSK	3	-1	11	-12	1	0.4	38	-11
RUSSIA	KAZAN	0	-3	7	-18	-2	2.1	42	-5
	MOSCOW	0	-3	10	-19	-1	0.3	63	5
	YEKATERINBURG	-2	-5	7	-19	-3	2.8	46	17
	OMSK	-1	-5	3	-14	-3	4.5	43	14
KAZAKH	KUSTANAY	1	-4	9	-18	-1	4.8	30	7
RUSSIA	BARNAUL	0	-6	7	-14	-3	3.9	31	2
	KHABAROVSK	0	-7	8	-19	-4	4.1	21	-2
	VLADIVOSTOK	5	0	12	-13	3	3.6	96	70
UKRAIN	KIEV	5	1	15	-11	3	1.7	46	-2
	LVOV	6	2	16	-6	4	1.7	95	51
	KIROVOGRAD	6	1	13	-18	3	2.1	91	56
	ODESSA	10	5	16	-9	7	1.7	51	8
RUSSIA	SARATOV	3	-1	12	-15	1	3.1	52	15

Based on Preliminary Reports

November 2004

COUNTRY	CITY	TEMPERATURE (C) AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DPART F/NRM	PRECIPITATION (MM) TOTAL	DPART F/NRM
UKRAIN	KHARKOV	5	-1	13	-11	2	1.4	37	-6
RUSSIA	VOLGOGRAD	5	0	13	-11	3	2.9	16	-14
	ASTRAKHAN	9	2	17	-9	5	2.5	51	34
	KRASNODAR	11	3	19	-5	7	1.5	74	1
	ORENBURG	2	-2	9	-19	0	4.0	67	32
KAZAKH	TSELINOGRAD	1	-4	6	-15	-1	5.1	45	19
	KARAGANDA	1	-5	8	-19	-2	3.3	56	29
GEORGI	TBILISI	14	6	24	-1	10	1.8	19	-15
UZBEKI	TASHKENT	17	8	23	2	13	4.3	65	17
TURKME	ASHKHABAD	17	7	26	-1	12	2.5	41	21
SYRIA	DAMASCUS	20	7	27	-4	13	1.3	26	3
ISRAEL	JERUSALEM	19	13	27	4	16	1.7	135	65
PAKIST	KARACHI	33	18	36	16	26	1.7	0	***
INDIA	AMRITSAR	26	8	29	6	17	-1.1	0	-7
	NEW DELHI	29	13	31	11	21	0.2	0	-8
	AHMEDABAD	33	19	36	13	26	1.4	1	-9
	INDORE	31	14	33	9	23	0.7	15	0
	CALCUTTA	30	18	31	16	24	-0.4	0	-37
	VERAVAL	34	22	36	19	28	2.0	0	-26
	BOMBAY	35	22	37	18	28	1.1	1	-5
	POONA	30	16	33	10	23	0.6	13	-14
	BEGAMPET	30	17	33	12	24	0.3	0	-29
	VISHAKHAPATNAM	31	22	35	19	27	0.4	0	-102
	MADRAS	30	23	31	20	27	0.4	232	-123
	MANGALORE	33	22	35	19	28	0.2	35	-31
HONGKO	HONG KONG INT	27	21	30	16	24	1.8	0	-36
N KORE	PYONGYANG	11	3	20	-4	7	2.4	109	69
S KORE	SEOUL	13	6	22	0	9	2.0	82	19
JAPAN	SAPPORO	11	4	19	-5	8	3.0	88	-15
	NAGOYA	19	10	24	6	15	2.7	103	23
	TOKYO	19	13	23	8	16	2.8	112	20
	YOKOHAMA	19	12	23	8	15	2.3	127	28
	KYOTO	19	10	24	5	14	1.6	70	7
	OSAKA	19	12	24	8	16	2.2	131	67
THAILA	PHITSANULOK	33	21	36	17	27	0.7	0	-33
	BANGKOK	35	26	38	23	30	2.6	5	-44
MALAYS	KUALA LUMPUR	33	24	35	22	28	1.5	426	138
VIETNA	HANOI	27	21	32	15	24	1.5	23	-23
CHINA	HARBIN	2	-5	12	-17	-1	3.6	24	14
	HAMI	8	-6	15	-13	1	1.0	0	-2
	LANCHOW	***	***	10	0	***	***	***	***
	BEIJING	12	2	18	-4	7	2.4	8	1
	TIENTSIN	12	2	18	-3	7	1.2	19	10
	LHASA	10	-3	14	-7	3	-0.2	4	3
	KUNMING	18	9	22	6	13	1.2	17	-25
	CHENGCHOW	15	6	23	-1	10	2.3	40	18
	YEHCHANG	19	10	24	4	15	2.1	44	-2
	HANKOW	19	11	28	3	15	2.6	54	5
	CHUNGKING	16	12	23	6	14	-0.3	84	35
	CHIHKIANG	18	10	25	4	14	1.6	119	65
	WU HU	19	9	28	0	14	2.3	87	28
	SHANGHAI	19	11	26	2	15	1.6	68	15
	NANCHANG	20	12	27	4	16	2.7	59	2
	TAIPEI	25	21	31	16	23	1.3	20	-52
	CANTON	27	17	32	12	22	2.2	6	-28
	NANNING	26	15	32	7	21	1.4	22	-19
CANARY	LAS PALMAS	25	18	29	16	22	1.0	24	7
MOROCC	CASABLANCA	21	13	30	8	17	1.0	63	10
	MARRAKECH	22	11	30	6	16	-0.1	27	3
ALGERI	ALGER	20	8	24	4	14	-1.1	111	30
	BATNA	15	4	20	-1	9	-1.2	99	82
TUNISI	TUNIS	20	13	25	9	16	0.5	117	53
NIGER	NIAMEY	37	22	40	18	30	1.7	0	-1
MALI	TIMBUKTU	34	19	38	15	27	1.3	0	-1
	BAMAKO	35	20	38	14	27	-0.2	0	-5
MAURIT	NOUAKCHOTT	31	21	37	16	***	***	29	27
SENEGA	DAKAR	30	25	33	22	27	1.4	0	-3
CHAGOS	DIEGO GARCIA	30	25	32	24	28	0.2	195	-46
LIBYA	TRIPOLI	22	13	37	9	***	***	19	-30
	BENGHAZI	22	15	30	7	***	***	53	11
EGYPT	CAIRO	26	16	32	9	21	1.7	1	-4
	ASWAN	30	16	37	9	23	1.6	0	0
KENYA	NAIROBI	24	15	27	15	20	0.3	95	-20
TANZAN	DAR ES SALAAM	32	23	33	20	27	0.9	56	-59
GABON	LIBREVILLE	30	24	31	21	27	1.2	264	-259
TOGO	LOME	33	25	36	23	29	1.6	16	-6
BURKIN	OUAGADOUGOU	36	22	38	19	29	1.1	10	8
COTE D	ABIDJAN	***	***	33	25	***	***	***	***
MOZAMB	MAPUTO	30	***	38	15	***	***	119	45
ZAMBIA	LUSAKA	29	19	33	14	24	-1.3	40	-52
ZIMBAB	KADOMA	32	17	34	12	24	-1.5	13	-73
S AFRI	PRETORIA	31	18	36	12	25	3.4	73	-39
	JOHANNESBURG	28	14	32	10	21	3.1	126	9
	BETHAL	28	13	32	6	20	2.4	83	-56
	DURBAN	27	20	31	14	23	1.6	45	-67
	CAPE TOWN	25	15	29	10	20	1.8	3	-14
CANADA	TORONTO	9	2	15	-5	5	2.2	65	-4
	MONTREAL	6	-2	14	-9	2	0.7	88	-4
	WINNIPEG	5	-6	13	-15	-1	4.2	12	-10
	REGINA	6	-9	16	-17	-1	3.9	3	-10
	SASKATOON	4	-8	13	-17	-2	4.2	2	-11
	LETHBRIDGE	9	-6	22	-15	2	2.9	25	9
	CALGARY	8	-5	18	-14	2	4.5	3	-9
	EDMONTON	5	-3	15	-6	1	4.5	3	-11
	VANCOUVER	9	4	14	-3	7	0.8	198	18
MEXICO	GUADALAJARA	25	12	27	5	18	1.0	0	-13
	TLAXCALA	23	7	26	2	15	0.2	0	-18
	ORIZABA	***	***	30	9	***	***	2	-75
BERMUD	ST GEORGES	23	18	26	15	21	-1.1	125	35
BAHAMA	NASSAU	***	22	32	16	***	***	2	-66
CUBA	HAVANA	28	18	31	12	23	-1.1	15	-71
JAMAIC	KINGSTON	32	25	34	23	28	1.0	4	-86
P RICO	SAN JUAN	29	24	31	21	26	-0.1	230	73
GUADEL	RAIZET	29	23	31	19	26	-0.2	345	149
MARTIN	LAMENTIN	30	23	32	19	27	0.8	595	394
BARBAD	BRIDGETOWN	30	24	32	22	27	0.3	356	224
TRINID	PORT OF SPAIN	32	24	34	23	28	1.2	247	49
COLOMB	BOGOTA	19	9	21	3	14	0.6	81	-7
VENEZU	CARACAS	31	25	34	24	28	1.2	237	179
F GUIA	CAYENNE	32	22	33	21	27	1.0	135	-18
BRAZIL	FORTALEZA	31	25	31	24	28	-0.3	1	-25
	RECIFE	30	26	31	23	28	-0.6	12	-16
	CAMPO GRANDE	33	22	37	16	28	2.0	94	-57
	FRANCA	27	19	31	14	23	0.2	181	28
	RIO DE JANEIRO	29	22	38	19	26	0.7	91	-9
	LONDRINA	29	18	35	14	24	1.0	135	-34
	SANTA MARIA	27	16	36	8	22	-0.1	138	14
	TORRES	23	17	25	11	20	-2.8	80	-61
PERU	LIMA	22	18	24	17	20	0.6	1	0
BOLIVI	LA PAZ	16	3	19	0	10	-0.1	37	-16
CHILE	SANTIAGO	25	10	31	4	18	0.5	45	40
ARGENT	IGUAZU	29	17	35	12	23	-1.1	222	85
	FORMOSA	28	19	37	13	24	-0.7	352	183
	CERES	29	16	37	7	23	0.6	46	-56
	CORDOBA	27	15	40	7	21	0.1	140	30
	RIO CUARTO	25	14	34	5	19	-0.3	46	-86
	ROSARIO	26	15	34	7	20	0.0	98	-12
	BUENOS AIRES	24	14	31	5	19	-0.3	63	-30
	SANTA ROSA	25	13	34	2	19	-0.7	93	-3
	TRES ARROYOS	23	12	32	3	17	0.5	87	2
MARSHA	MAJURO	30	27	32	25	29	1.3	155	-166
NEW CA	NOUMEA	27	21	30	18	24	0.2	14	-55
FIJI	NAUSORI	28	21	31	17	25	-0.3	69	-174
SAMOA	PAGO PAGO	31	26	31	24	29	1.2	108	-176
TAHITI	PAPEETE	30	24	32	22	27	0.9	81	-50
PNEWGU	PORT MORESBY	***	***	32	23	***	***	61	8
NZEALA	AUCKLAND	20	12	23	8	16	***	33	***
	WELLINGTON	19	12	24	8	15	***	52	***
AUSTRA	DARWIN	33	26	36	24	30	0.3	188	54
	BRISBANE	26	18	34	14	22	-0.1	202	95
	PERTH	26	13	37	3	20	0.5	44	17
	CEDUNA	25	13	41	5	19	0.1	13	-7
	ADELAIDE	24	13	36	6	19	0.4	21	0
	MELBOURNE	21	11	36	4	16	0.5	100	51
	WAGGA	26	11	41	3	19	0.5	86	45
	CANBERRA	24	9	38	2	17	0.8	87	20
INDONE	SERANG	32	24	35	20	28	0.3	87	-62
PHILIP	MANILA	31	25	33	23	28	0.1	86	-57

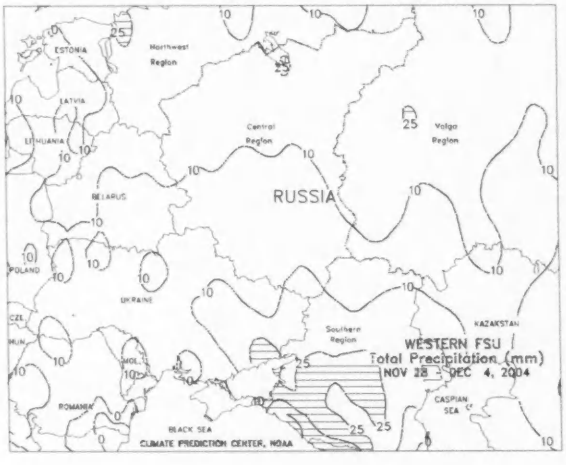
Based on Preliminary Reports

EUROPE

Much-needed rain covered France, Spain (20-50 mm), and Portugal (25-60 mm), boosting moisture supplies for winter grain germination (southern Spain) and establishment (northern Spain and France). Moderate rain (15-40 mm) covered southern France, while lighter amounts (5-15 mm) fell across the north. Widespread rain (25-75 mm) continued to boost moisture supplies across northern and central Italy. Light rain (1-10 mm) covered northern Europe (England into Poland), maintaining adequate topsoil moisture for winter crops. From Germany eastward, winter crops continued to enter dormancy despite warmer weather. In the Balkans, heavy rain (30-100 mm) fell across the Adriatic coast, and lighter rain (3-20 mm) fell in Croatia, Serbia, and western Romania, aiding winter grains. Mostly dry weather prevailed in southern Romania and Bulgaria, where more rain is needed, especially in Bulgaria. Temperatures averaged 2 to 5 degrees C above normal across central and eastern Europe and near normal across the west.

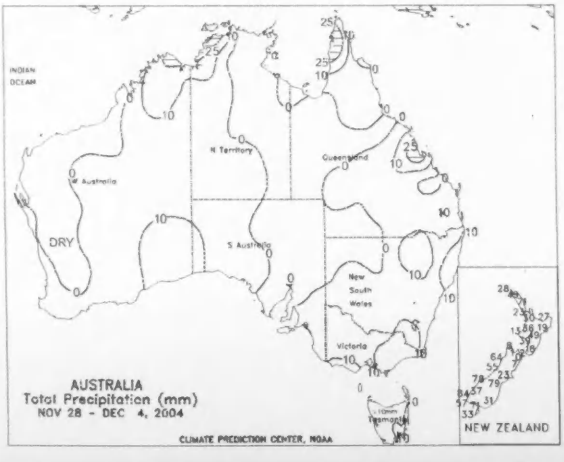
FSU-WESTERN

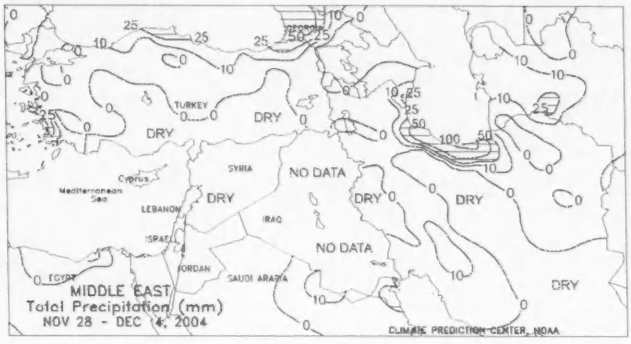
Bitterly cold weather remained entrenched over winter grain areas in northern Russia (Central and Volga Regions) during most of the week. At most locations, extreme minimum temperatures ranged from -25 to -16 degrees C, reaching or exceeding the threshold for potential winterkill. However, widespread snow (4-25 mm of liquid equivalent) provided a fresh protective snow cover, minimizing the threat for widespread freeze damage. Farther south, a mixture of rain and snow (4-25 mm or more) accompanied milder weather in major winter wheat areas of Ukraine and the Southern Region in Russia. Greatest amounts of moisture (25-50 mm or more) were observed in extreme southern areas in Russia, falling mostly in the form of rain. A significant warming trend overspread the entire region late in the week, improving overwintering conditions for winter grains in northern Russia but keeping major winter wheat areas in Ukraine and the Southern Region in Russia snow-free. Weekly temperatures averaged 2 to 6 degrees C below normal in northern Russia and 1 to 3 degrees C above normal in most of Ukraine and the southern half of the Southern Region in Russia.



AUSTRALIA

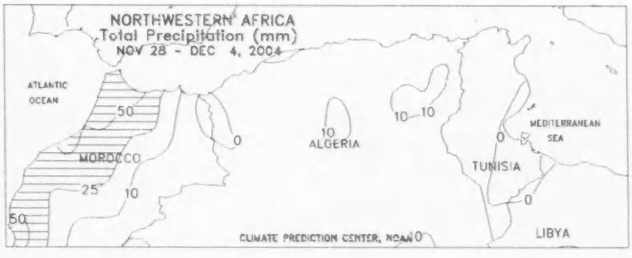
In Western Australia, South Australia, Victoria, and southern New South Wales, scattered, light showers (less than 5 mm) caused only brief delays in winter wheat and barley harvesting and little if any degradation in grain quality. In northern New South Wales and Queensland, rainfall (3-10 mm) was more widespread and locally heavier (locally more than 20 mm). The rainfall improved local moisture supplies, including topsoil moisture and reservoir levels, for sorghum and cotton. Winter grain harvesting was well advanced in this region. As a result, concerns about the wetness were likely minimal. Temperatures across eastern Australia averaged about 1 to 3 degrees C above normal, spurring winter grain maturation and early summer crop development. In Western Australia, temperatures were generally seasonable.





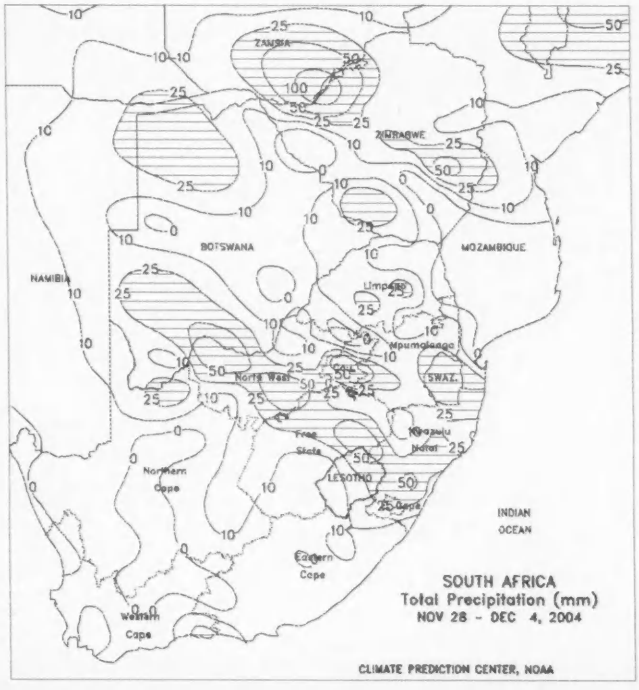
MIDDLE EAST

Across Turkey, early-week unseasonably cold weather (minimum temperatures -12 to -19 degrees C) covered the central Plateau, but widespread snow cover protected winter grains. By week's end, however, much warmer weather prevailed (minimum temperatures ranging from just below to above freezing). Nevertheless, the recent cold weather has stressed winter grains and prompted them to begin entering dormancy. Mostly dry weather covered Turkey, with only light to moderate rain reported along the northern coast. Across the eastern Mediterranean and western Iran, mostly dry weather prevailed after last week's widespread rain. In western Iran, colder weather (2-3 degrees C below normal) prompted winter grain to begin entering dormancy.



NORTHWESTERN AFRICA

Across Morocco, widespread rain (5-40 mm) boosted soil moisture for winter grain germination but slowed fieldwork. In Algeria and Tunisia, mostly dry weather (less than 5 mm) favored winter grain planting, but more rain is needed to maintain adequate topsoil moisture for germination after 3 weeks of mostly dry weather. Near- to above-normal temperatures increased soil evaporation rates.

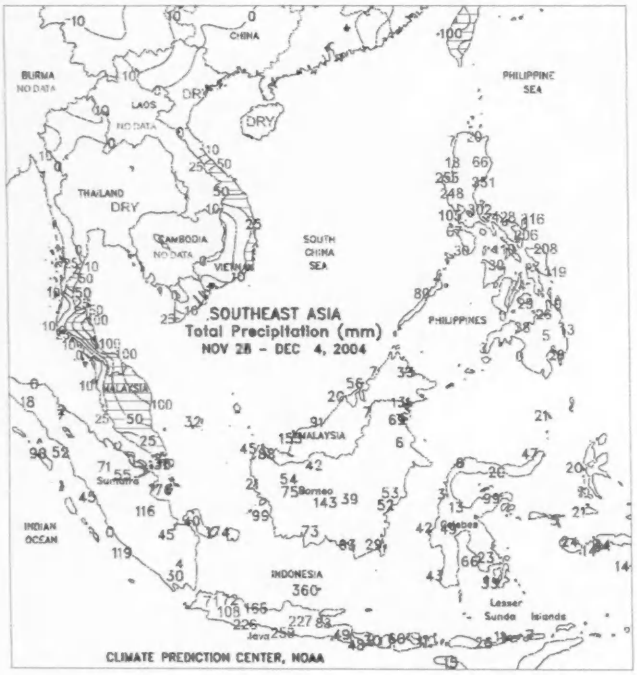


SOUTH AFRICA

Following persistent dryness, welcomed rain (10-55 mm) stretched from North West and northern Free State eastward through Mpumalanga and KwaZulu-Natal. The rain was especially welcomed in the western corn belt, helping to stabilize conditions for drought-stressed summer crops. Nevertheless, more rain will be needed in upcoming weeks to eliminate the drought and to maximize yield potential across this region. The rain was also welcomed across the eastern corn belt, maintaining topsoil moisture for germinating summer crops. Unseasonably warm weather (temperatures about 2 degrees C above normal) spurred summer crop development across the corn belt, despite the widespread clouds and showers. Farther south, isolated showers (about 20 mm) maintained local moisture supplies in the Cape Provinces.

EASTERN ASIA

Light showers (less than 10 mm) maintained adequate soil moisture for the establishment of oilseeds in the Sichuan Basin and winter wheat on the North China Plain. Average temperatures below 5 degrees C eased winter wheat into dormancy in the northern growing areas, while wheat remained vegetative elsewhere. Showers (10-50 mm or more) from Typhoon Nanmadol eased long-term dryness in the southeastern provinces of Fujian and Zhejiang. Heavier showers (50-200 mm or more) from the storm caused flooding from Taiwan to southern Japan. In Japan, the flooding exacerbated wetness in areas that have been routinely affected by tropical cyclones this year. Temperatures were 1 to 5 degrees C above normal throughout the region.

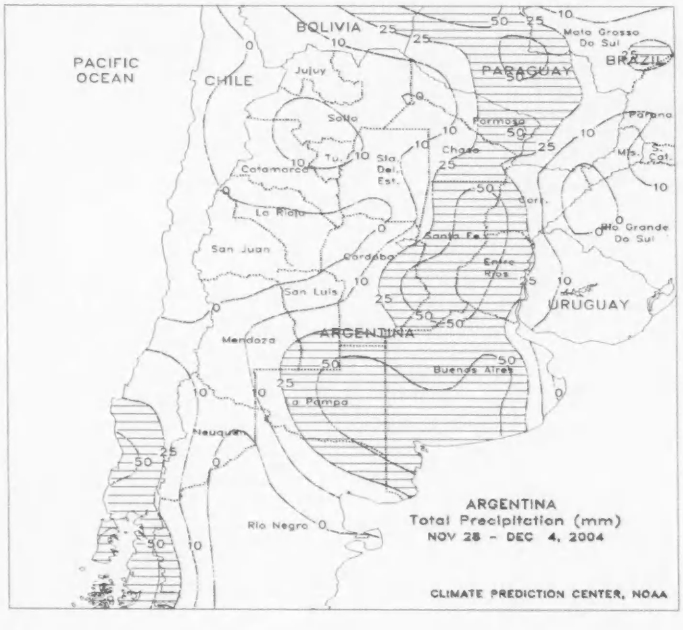


SOUTHEAST ASIA

Typhoon Nanmadol (130 knots) crossed Luzon in the northern Philippines, causing widespread flooding to major rice and corn areas. Heavy showers (50-100 mm) extended into the east-central Philippines, while mostly dry weather prevailed in the south. In Indonesia, showers remained heavy (50-200 mm or more) and widespread, boosting moisture supplies for vegetative rice in Java and oil palm in Sumatra.

BRAZIL

Warm, mostly dry weather (scattered amounts less than 20 mm) covered much of southern Brazil (Parana southward), favoring soybean and corn planting. The drier weather also aided winter wheat harvesting. Further north, a large band of showers (25-100 mm) extended from Mato Grosso to Minas Gerais, Tocantins, and western Bahia, favoring soybean development. Temperatures averaged 1 to 3 degrees C above normal across most of Brazil. According to Independent analyst Safras e Mercado, soybeans were 90 percent planted as of December 3, slightly behind last year's pace.



ARGENTINA

Widespread rain (10-75 mm) continued across the major agricultural areas, boosting soil moisture reserves for summer crop germination and establishment but likely causing additional problems with the winter wheat harvest. Near- to above-normal temperatures continued to spur rapid summer crop germination, with high temperatures generally ranging from the lower 30s degrees C in southeastern Buenos Aires to the upper 30s degree C in the more northerly rangeland and cotton areas. According to Argentina's Ministry of Agriculture, sunseed, corn, and soybeans were 95, 81, and 67 percent planted, respectively, as of December 3, with development of all crops progressing ahead of last year's paces. In addition, winter wheat was 28 percent harvested compared with 39 percent last year.

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